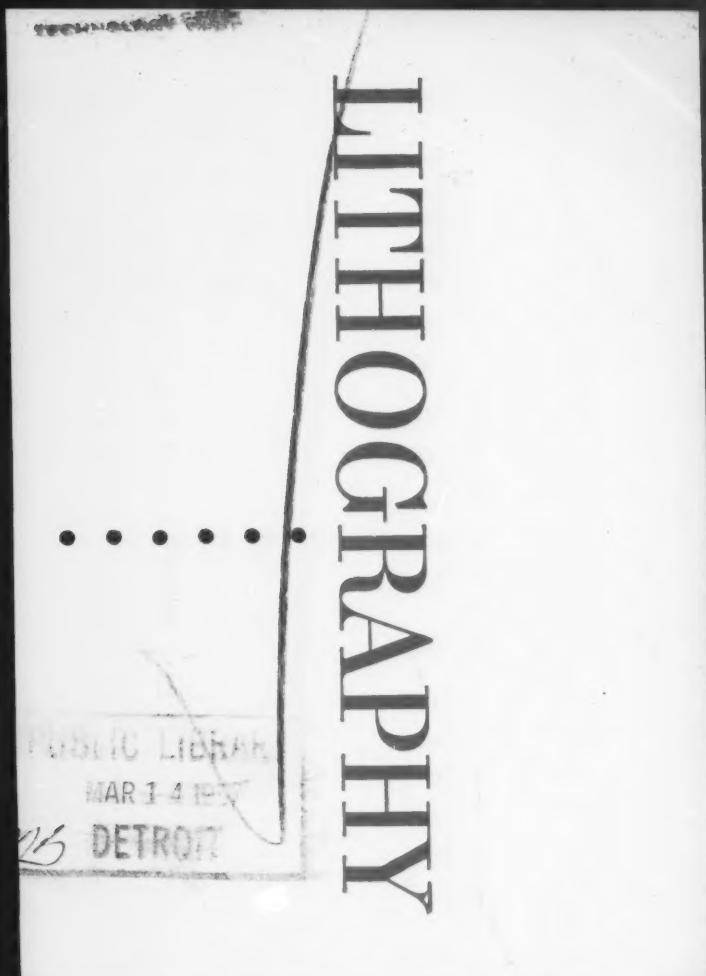


*Modern*

*In this issue*

The Guide in Masking  
Three Color: Part I  
Opaquing Techniques  
Flexichrome for Litho  
SGAA To Meet  
LNA Plans Program

MARCH, 1957





## His Work Triumphs Through Linotype

In the last ten years, P. J. Conkwright, Jr., medal winning Princeton University Press typographer, has had more books in the AIGA's "50 best" than any other designer. This, in itself, is testament to Mr. Conkwright's unerring good taste in design.

Monticello was developed by Linotype with his collaboration. A perfect marriage between old style and modern faces, Monticello was derived from a type cast at Philadelphia in the late eighteenth century. In the recutting, all the subtle design characteristics of the original were retained, while printability and "color" were improved.

The taste of P. J. Conkwright, Jr., as reflected in pleasant-reading, useful Monticello, exemplifies the rich typographic resources, both American and European, which are at *your* command through Linotype.

*"P. J. Conkwright, Jr., one of the outstanding present-day designers, deserves the thanks of all printers who take pride in their work. In Monticello, he has guarded against that over-refinement of individual letter characteristics so deplorable in many adaptations of classical letter forms. While contemporary in feeling, it is soundly based on the great principles of the past. Monticello is eminently suitable for both traditional and contemporary printing."*

FRED ANTHOENSEN, President  
The Anthoensen Press  
Portland, Maine



**Mergenthaler Linotype Company, 29 Ryerson Street, Brooklyn 5, N. Y.**

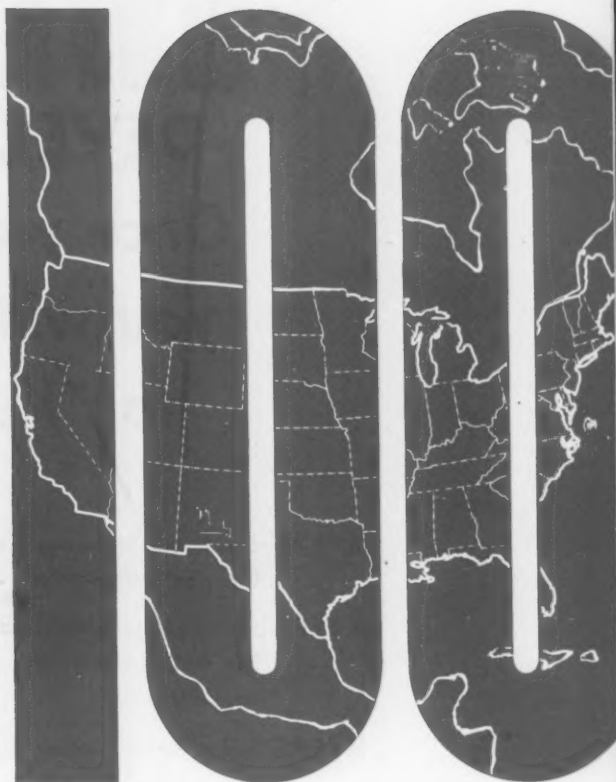
Set in Linotype Monticello and Caslon Old Face

• LINOTYPE •

**Agencies: Atlanta, Boston, Chicago, Cleveland, Dallas, Los Angeles, New York, San Francisco. In Canada: Canadian Linotype, Limited, Toronto, Ontario**



# OUT OF



## offset printers prefer Sensitized Plates...here is why

"We can make 2 presensitized plates to 1 zinc," says a lithographer.

"We haven't used zinc for years. Too many plate failures," says another.

"Halftone quality on presensitized is superior to zinc," says a third.

"We haven't the time, space, personnel or money for plate-making," says still another.

Summed up, this cross section of offset lithographers shows that Presensitized Plates:

1. Cut production cost as much as 50 per cent
2. Speed production and reduce lost press time by a third
3. Save time, labor, space and equipment
4. Improve repro quality
5. Eliminate pre-treatment coating variables
6. Reproduce with greater consistency
7. Handle easier on the press

8. Turn out longer runs, "up to 100M not uncommon," says one lithographer

9. Provide greater flexibility in meeting changing production needs

10. Help build greater profits

If you are among those who have yet to discover the economy, flexibility, quality and convenience of Presensitized Plates—we invite you to call or write Roberts & Porter, 622 Greenwich Street, New York 14, for a demonstration in your plant today. No obligation. Just give name and size of your press (or presses) and plate sizes.

All Roberts & Porter branches carry complete stocks in all available sizes, of Alum-O-Lith...Enco...3M.

Ask for a demonstration. Let Roberts & Porter service and supply your Presensitized Plate requirements.

Write for our new price list and comparative performance data on Presensitized Plates. Do it now—90 out of 100 can't be wrong!

# ROBERTS & PORTER, INC.

**Milwaukee**  
1533 N. Jackson St.

**Cleveland**  
1825 E. 18th St.

**Cincinnati**  
229 E. 6th St.

**Baltimore**  
5 S. Gay St.

**Philadelphia**  
1205 Hamilton St.

**Boston**  
88 Broad St.

**New York**  
622 Greenwich St.

**Chicago**  
555 W. Adams St.

**Detroit**  
1025 Brush St.

**Kansas City**  
1434 Wyandotte St.

**San Francisco**  
1309 Howard St.

**Los Angeles**  
920 E. Pico Blvd.

# CHEMCO'S POWERDOT DEVELOPER

*Once you try it,  
you will buy it  
for "KEEPS"*



- KEEPS** longer tray life — less dropoff, fewer bath changes per shift
- KEEPS** working faster — develops more film, with perfect results, hour after hour
- KEEPS** higher contrast — finer highlight dots and line resolution
- KEEPS** uniformity — exposures are more constant, saves camera adjustment and development time
- KEEPS** dots firmer — for sharper etching
- KEEPS** production high — and costs down
- KEEPS** users happy — with dependable performance

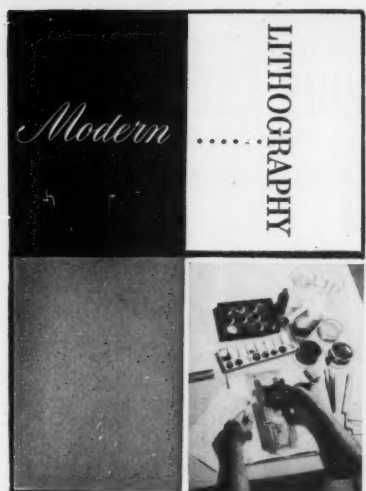


**CHEMCO POWERDOT** is the most modern of all formaldehyde-type developers. Produced through Chemco research, it is manufactured according to patented formulas. Easy to mix, it is faster, gives more contrast and has longer tray life.

To prove it's best, make the Powerdot test. Ask your Chemco representative for a demonstration in your shop or, better still, order now from the nearest Chemco warehouse.



**chemco PHOTOPRODUCTS COMPANY, INC.** GLEN COVE, N. Y.  
ATLANTA BOSTON CHICAGO DALLAS DETROIT NEW ORLEANS NEW YORK



## COVER

Artist at Todd Studios in St. Louis applies Flexichrome dyes to a relief image. Color is applied, then blotted until desired color is built up. See article on page 39 for complete details.

WAYNE E. DORLAND  
Publisher

HAMILTON C. CARSON  
Editor

FRANK T. HUMMLER  
Associate Editor

RALPH DORLAND  
Advertising Manager

ROBERT F. GARTY  
Midwest Manager  
P. O. Box 126  
Park Forest, Ill.  
SKyline 6-4499

CLIFFORD LINDEMAN  
Circulation Manager



## Feature Articles

Graphic 57 Plans June Exhibition.....	32
The Guide In Masking, Part II.....	34
<i>By Zoltan I. Poharnok</i>	
Three-Color Direct Separation Part II.....	36
<i>By John M. Lupo Jr.</i>	
How Flexichrome Is Used in Litho.....	39
<i>By Mildred Weiler</i>	
LNA Plans Convention for April 1-3.....	41
Photographic Film Opaquing.....	42
<i>By Asbjorn Brekke</i>	
Southern GAA To Meet at Mobile.....	44
Specks in Prints.....	46
Gugler Lithographs Winning Poster.....	49
Keys To Better Profits.....	50
Keeping Pace with New Equipment.....	52
<i>By Robert Rossell</i>	

## Departments

Letters To The Editor.....	29
Editorial.....	31
Photographic Clinic.....	56
<i>By Herbert P. Paschel</i>	
Metal Decorating Section.....	59
Production Clinic.....	63
<i>By Theodore F. Makarius</i>	
Technical Section.....	66
Technical Briefs.....	75
Litho Club News.....	79
News About The Trade.....	84
Meeting Calendar.....	105
Equipment Supplies Service.....	129
Local Buyers Guide.....	145
Classified Advertisement.....	147
Index to Advertisers.....	151
Tale Ends.....	152

## MODERN LITHOGRAPHY

VOLUME 25, NUMBER 3

MARCH, 1957

**SUBSCRIPTION RATES:** One year, \$3.00; two years, \$5.00. Canada and Pan America, one year, \$4.00; two years, \$7.00. Foreign, one year, \$9.00; two years, \$15.00. Group subscription (U. S. only) Four or more entered as a group, \$2.00 each. (May be sent to different addresses.)

**SINGLE COPIES:** current issue: \$.50; all back numbers \$1.00. Postage and handling charges for foreign countries on single copies: \$1.00. Claims for missing numbers not allowed if received more than 60 days from date of mailing. No claims allowed from subscribers outside U. S. because of failure to notify Circulation Department of change of address, or because a copy is "missing from files."

**PUBLISHED MONTHLY** on the 5th by Industry Publications, Inc., Publication office: Box 31, Caldwell, N. J. Advertising rates made known on application. Closing date for copy — 10th of the month preceding month of issue. Second class mailing privileges authorized at Caldwell, N. J., with additional entry at New York, N. Y.

Address all correspondence to Box 31, Caldwell, N. J.

Change of Address: Allow 30 days. Give old and new address.

Address all correspondence to Box 31, Caldwell, N. J.

# STOP taking your gum solutions for granted

## You'll get better plates if you read

## these important facts about **new**

# Hunt GRAPH-O-GUM®



In comparing our new product, GRAPH-O-GUM, with the many gums used throughout the United States, we turned up many facts about gum—facts that maybe you don't know. All gums are *not* alike—far from it. If you've been thinking it doesn't much matter which gum you use, chances are you've been blaming your plate and press troubles on other things—when the real cause has been the *gum* you used. Gum is the most important material you use in the making and running of a lithographic plate; to insure a perfect plate on every press run, the quality of your gum must be perfect.

#### WHAT'S SO IMPORTANT ABOUT ODOR?

Here is why odor is important: *The perfect gum has almost no odor.*

Some gums are fairly odorless *when fresh*. But

if the gum you use *changes* its odor, it is starting to sour. That means it is undergoing a chemical change which reduces its performance—its plate desensitizing property.

And *that* means it's going to give you poorer results—in your gum etch, in your fountain solutions, and in gumming up plates.

Because Hunt GRAPH-O-GUM is chemically stable to the last ounce, it has almost no odor. For this reason you can count on it to keep your plates from blinding and scumming, *not only when it's new, but as long as you use it.*

#### WHY IS VISCOSITY IMPORTANT?

Viscosity is important because you cannot get a perfect gum film on each plate unless you are working with a gum of unchanging viscosity.

If the gum you are using thickens and sludges up by the time you get down near the bottom of the drum—you are actually using a gum of much higher viscosity. This more viscous gum will cause streaking and scumming of plates, and gum build-up in the fountain solution. You can depend on GRAPH-O-GUM to be of constant viscosity in every ounce from the top of the drum right down to the bottom.

#### PRESSMEN FIND THAT...

1 oz. of GRAPH-O-GUM per gallon of fountain solution always keeps the non-printing areas clean as a whistle. The secret is the thin, invisible, but tightly adhering water-receptive gum film which Hunt GRAPH-O-GUM lays down on the non-image area.

Don't delay trying this new, improved gum. Order Hunt GRAPH-O-GUM today on our money-back guarantee and see for yourself. Never again will you say that "all gum is alike."





**NEW HUNT GRAPH-O-GUM IS A 3-WAY IMPROVED GUM**

Graph-O-Gum is almost odorless. GRAPH-O-GUM is a stabilized solution which does not sour on standing—has superior storage life whether in the gallon bottles or in the 54 gallon drum.

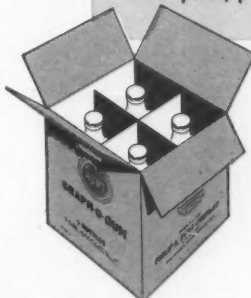
Graph-O-Gum is always clear. GRAPH-O-GUM is a clear solution which always stays clear—never develops sludge or sediment on standing.

Graph-O-Gum has constant viscosity. GRAPH-O-GUM will always give you the same uniform gum film on every plate—because every gallon rubs down the same. Guaranteed 14° Bé. from top to bottom.

Order a carton of Hunt Graph-O-Gum (Stabilized gum arabic solution 14° Bé.) on our

**MONEY-BACK GUARANTEE.**

Order a carton (4—1 gallon bottles) or a 54 gallon drum of HUNT GRAPH-O-GUM today from your nearest Hunt Branch. If it does not do all we say it does, return the unused portion and we will refund the purchase price, plus shipping charges.



GRAPH-O-GUM is available in:

4—1 gal. bottles per carton.  
54 gal. drums (FREE spigot with first order).  
No deposit—non returnable containers.

Manufacturing  
Chemists



Established  
1909

**PHILIP A. HUNT COMPANY**

PALISADES PARK, N. J.

Chicago • Cleveland • Cambridge • Brooklyn • Atlanta • Dallas • Los Angeles • San Francisco





*Dresses by Ceil Chapman*

*Furs by Dein-Bacher of the Waldorf*



# ACCENT ON QUALITY

Today fine reproduction need not be limited entirely to high-priced enamels but can be achieved on modern papers costing far less than you might think. At Kimberly-Clark quality is "engineered" into every sheet in every grade. And quality at every grade level means that ream after ream has the same careful balance of whiteness, dimensional stability, opacity, strength and a host of other important properties. It will pay you to compare Kimberly-Clark Printing Papers in any way you choose—including the cost. We're as close to you as your nearest distributor.

## Everything comes to life on Kimberly-Clark Papers

*for Modern Lithography . . .* Prentice Offset Enamel  
Lithofect Offset Enamel • Shorewood Coated Offset  
Fontana Dull Coated Offset

*for Modern Letterpress . . .* Hifect Enamel • Crandon  
Enamel • Trufect Coated Book • Multifect Coated Book

## Kimberly Clark

COATED PRINTING PAPERS



Kimberly-Clark Corporation • Neenah, Wisconsin

7

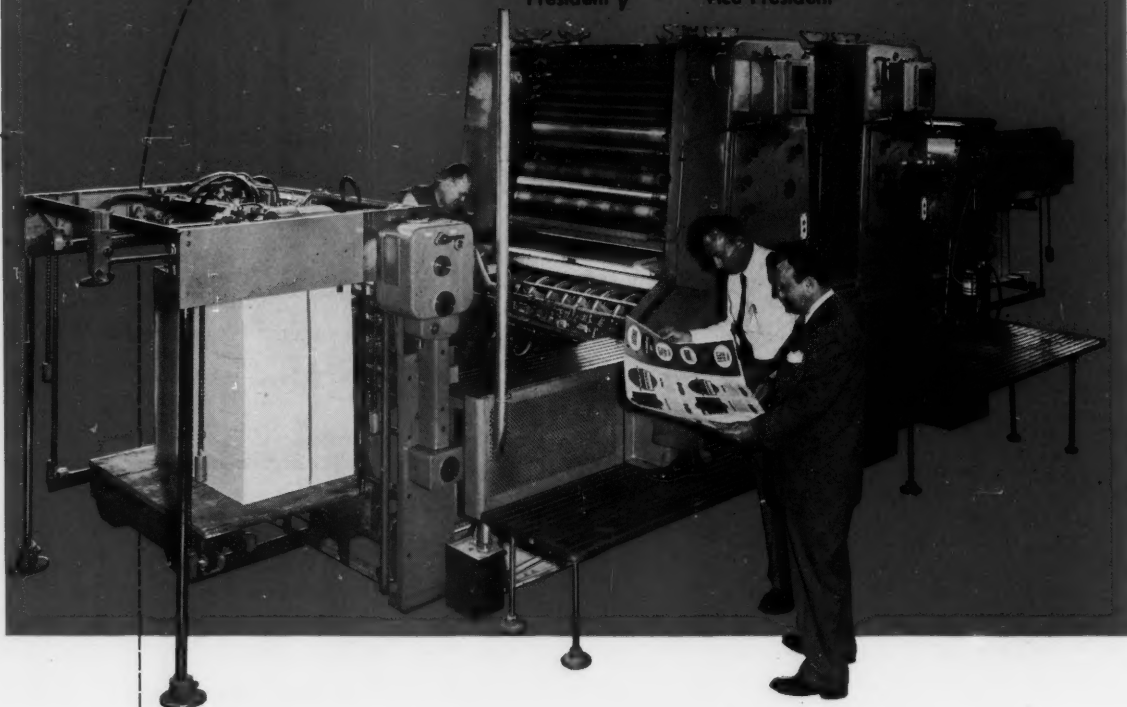
“FASTER MAKE-READYS . . .

HIGHER RUNNING SPEEDS . . .

Highest Quality Offset Printing at Lower Production Cost”

Litho Press, Inc., Indianapolis, Indiana

*B. J. Lacy* President  
*C. H. Schmeider* Vice President



\* This printer's experience is typical of satisfied owners of

*Precision Engineered*

## MILLER-M•A•N OFFSET PRESSES

Here are a few quotes from letters received from Litho Press executives: "The Miller-M.A.N. Press is everything you said it was, and more. Faster make-readys and higher running speeds are due to ease of operation and accessibility of necessary adjustments. Our press crew is well satisfied and takes pride in the high quality production it is giving us."

Here's another: "We are noted as a quality house and have to think of quality first."

Since we are in a competitive field pricewise, this is a major problem. With the Miller-M.A.N. Press we have been able to print highest quality offset at lower production costs than we ever accomplished with other makes of two-color presses."

Let us tell you more about the Miller-M.A.N. two to four color offset presses in sheet sizes 30"x42", 36"x48", 40"x56", and how they can produce quality work for you at less cost. Write today for further details.



**MILLER PRINTING MACHINERY CO.**

1135 Reedsdale Street, Pittsburgh 33, Pa.

**MILLER PRINTING MACHINERY CO. OF CANADA LIMITED**

730 Bay St., Toronto 2, Ontario





count on  
your Nekoosa  
paper merchant  
for papers  
that will  
always run

# FASTER

Nekoosa Papers have  
less curl...less wrinkle.

This means non-stop  
runs...and faster, more  
profitable production.

The way to get it is  
to get to know your  
Nekoosa Paper  
Merchant...and the  
complete Nekoosa line.

He has samples for  
you. Just ask him!

## Nekoosa PAPERS



BOND • LEDGER • DUPLICATOR • Mimeo • MANIFOLD  
OFFSET • OPAQUE • MASTER-LUCENT  
and companion ARDOR Papers

NEKOOSA-EDWARDS PAPER COMPANY  
PORT EDWARDS, WISCONSIN

## "CHAMPION" Deep Etch DOWN-DRAFT Lithographers Work Table

### COMPLETELY ELIMINATES ALL HAZARDOUS FUMES

#### Check these advantages:

- ✓ Removes all hazardous fumes at their source—no odor in shop and offices.
- ✓ Table at convenient working height.
- ✓ Exhaust slot removes contaminated air through slot all around perimeter of working area at high velocity.
- ✓ Acid resistant KOROSEAL lined disposal pitches to a KOROSEAL lined 2" drain.
- ✓ Processing of plates on an everlasting smooth surfaced slate slab.
- ✓ Large heavy duty ball-bearing type built-in suction blower operates quietly and is belt driven by a standard speed motor.
- ✓ Reduces absenteeism.
- ✓ Tends to reduce insurance rates.
- ✓ Increases production.



4 POPULAR SIZES  
(Other Sizes Upon Request)

No.	Slate Slab	Overall Dimensions (All 32 1/2" High)	Exhaust Blower Capacity: Cu. Ft. Air Per Minute	Motor H. P.
1	30"x40"	42"x50"	2500	1
2	42"x50"	54"x62"	3200	1 1/2
3	50"x60"	62"x72"	4200	1 1/2
4	60"x80"	72"x92"	4800	2

### SOME OF THE USERS OF "CHAMPION" EQUIPMENT

#### IN CHICAGO:

Jahn & Ollier Engraving Co.  
Chicago Litho Plate Graining  
Co.  
American Offset Co.  
Collins, Miller & Hutchings  
Superior Engraving Co.  
R. R. Donnelley & Sons Co.  
Central Type Setting Co.  
Caspers Tin Plate Co.  
American Can Co.

#### OUT-OF-TOWN USERS

Eastman Kodak Co.  
Rochester, N. Y.  
Gugler Litho Co.  
Milwaukee, Wis.  
Conner Lithographers  
Detroit, Mich.  
Hall Brothers  
Kansas City, Mo.  
Epsen Litho Co.  
Omaha, Neb.  
Atlanta Litho Co.  
Atlanta, Ga.  
Crane Howard Litho Co.  
Cleveland, Ohio  
Arrow Engraving Co.  
Cleveland, Ohio  
Marathon Corporation  
Neenah, Wis.  
A. L. Garber Co.  
Ashland, Ohio  
Litho Plate Service Co.  
Toledo, Ohio  
American Litho Co., Inc.  
Atlanta, Ga.  
Ideal Litho Service  
San Antonio, Texas  
Strobridge Litho Co.  
Cincinnati, Ohio  
Lithographic Plate Service  
North Hollywood, Cal.

#### IN LOS ANGELES:

Mission Engraving Co.  
Dillion Lithograph Co.  
Colortone

### DISTRIBUTORS

Bridgeport Engraver's Supply Co.  
California Ink Co.  
Harold M. Pitman Co.  
E. T. Sullibarger Co.  
Roberts & Porter, Inc.

#### IN CANADA

Toronto Type Founders Co., Ltd.  
Latimer, Ltd., Toronto  
Robert Allworth, Ltd., Toronto



## "CHAMPION" Improved TEMPERATURE CONTROLLED Developing Sinks

### MAINTAINS EVEN TEMPERATURE WITHIN A FRACTION OF A DEGREE

#### Features:

- ✓ Recirculating pump equalizes sink water temperature by forced flow of water around and under developing trays.
- ✓ Will maintain separate desired temperatures for sink trays (heating and cooling) and for storage compartment (cooling) to within a fraction of a degree of setting.
- ✓ Equipped with latest type hermetically sealed, trouble free refrigerating unit.
- ✓ In operation a continuous flow of water is not required. Result: no water wasted.
- ✓ Disposal trough for tray contents in back for convenience.
- ✓ High back splash, sink aprons, etc. constructed of polished stainless steel, heliarc welded.

#1	3 Trays	20x24 Film Size	32 1/2" x 74"
#2	3 Trays	26x30 Film Size	39" x 93"
#3	3 Trays	30x40 Film Size	49" x 105"

... and other sizes available for your special requirements.

manufactured by **H. SCHMIDT & CO.**

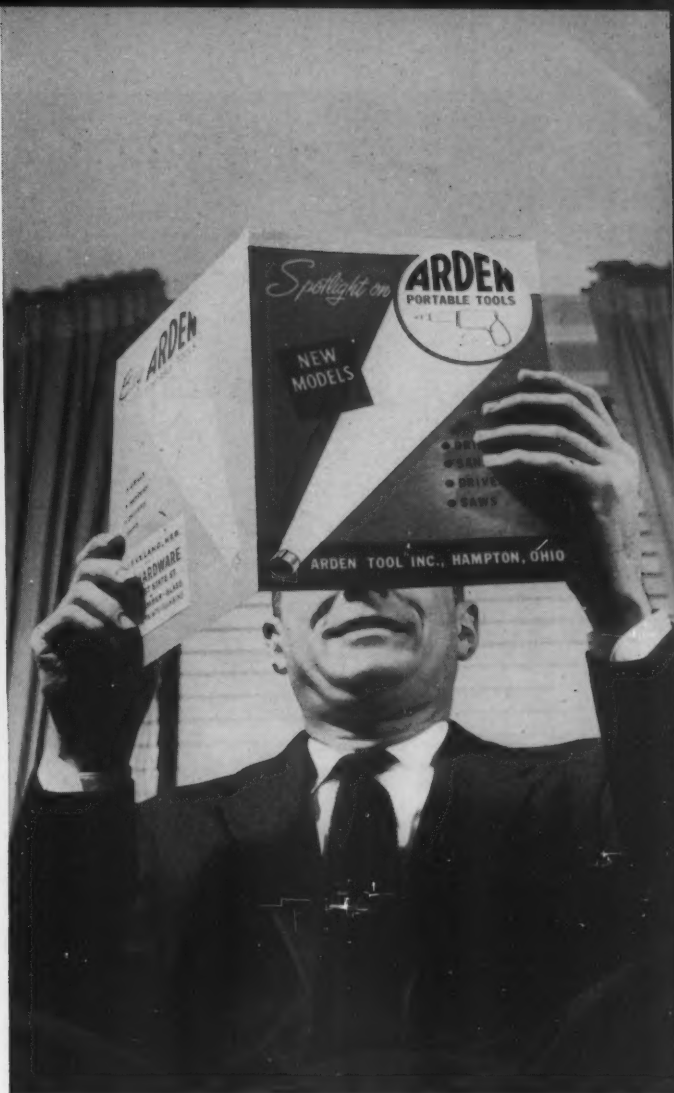
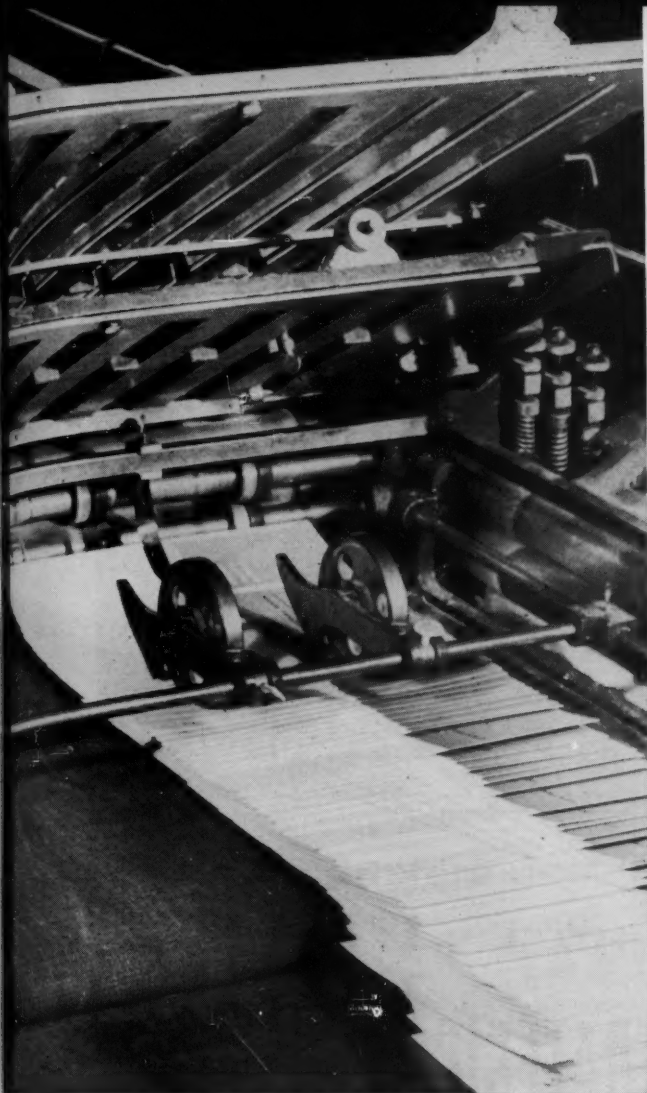
ESTABLISHED 1891

317 S. Paulina St., Chicago 12, Ill.

SEaley 3-0404







## "Scores well" in the bindery... with customers, too

Strong, pure fibers give Hammermill Cover a pliability that enables it to score and fold neatly and cleanly, so you can deliver a better-looking job. And the durability of Hammermill Cover enables it to withstand repeated handling without cracking at the folds or roughing up at the corners. Keeps your printed work looking better...longer.

The high brightness of Hammermill Cover gives printing the extra sparkle that impresses customers. And Hammermill Cover now contains Neutrancel® pulp—an exclusive Hammermill development that brings the best qualities of northern hardwoods to fine papers.

Hammermill Cover with Neutrancel has greater bulk to give it that important "feel" that says "QUALITY." And the more level surface obtained with Neutrancel gives extra sparkle to illustrations, solids, type—letterpress or offset.

Get Hammermill Cover in a rainbow choice of eight popular, like-sided colors, and cleanest white. Recommend Hammermill Cover the next time you quote on a cover job. And remember, for a cover job, there's no paper like a good cover paper. Hammermill Paper Company, Erie, Pennsylvania.

# HAMMERMILL COVER

BY THE MAKERS OF HAMMERMILL BOND

FOR CATALOGS • BOOKLETS • MENUS • PRICE LISTS • FOLDERS • BROADSIDES • MANUALS



## STRATEGIC SERVICE

S&V branches, and affiliates the world over, are geared to satisfy customers. Using the most modern ink manufacturing techniques, they operate in strategic geographical locations, ideally suited to provide *prompt, local attention* to all printers in their areas.

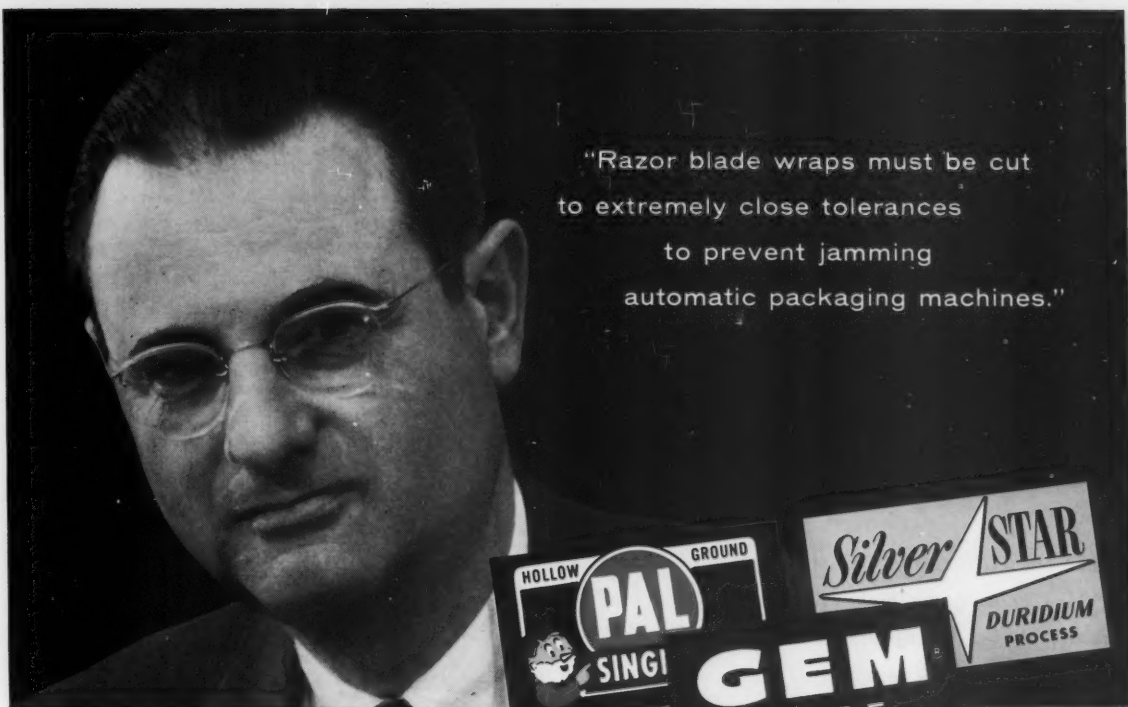
Ask any customer. You'll find that he relies on the sound advice and expert technical guidance that his S&V representative is always ready to offer—the fast, dependable response to his trouble calls. That's why today's vast and vital Graphic Arts industry has come to rely on S&V for *all* its printing ink needs.



# Sinclair and Valentine Co.

Main Office and Factory: 611 West 129th Street, New York 27, N. Y.

OVER 35 BRANCHES PROVIDE SERVICE FROM COAST TO COAST



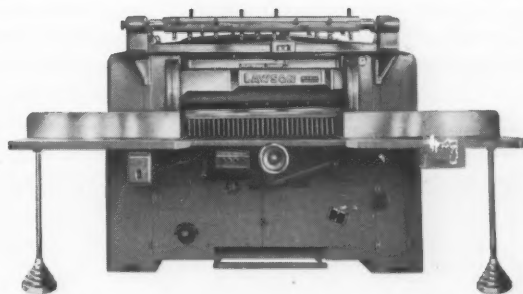
"Razor blade wraps must be cut  
to extremely close tolerances  
to prevent jamming  
automatic packaging machines."

**"Our printers use  
LAWSON ELECTRONIC SPACER CUTTERS"**

Stecher-Traung Lithograph Corporation and Chopp Printing Specialties, Inc., print and cut wrappers for Gem, Pal, and Silver Star razor blades. They know the hairline cutting tolerances involved in automatic packaging. For cleaner, faster cutting that's money-saving for all concerned... they rely on the amazingly accurate LAWSON Series V-65 Electronic Spacer Cutter.

— says Leo Wise, Director of Purchasing,  
American Safety Razor Corporation

**Electronic spacing accuracy to .002"**  
— ton after ton, day after day. It's fast and easy to set up and eliminates hand gauging. Truly cushioned hydraulic clamp won't mar top sheets or disturb alignment of the lift. Two-end pull straightline knife action cuts full 6½" lifts of toughest papers straight and true from top to bottom.



*Pioneers in paper cutting machinery since 1898*

**E. P. LAWSON CO.** Main Office • 426 West 33rd Street, New York 1, N. Y.  
**CHICAGO:** 628 So. Dearborn Street      **BOSTON:** 176 Federal Street      **PHILADELPHIA:** Bourse Building

*Exclusive Distributors Sales and Service*

• Harry W. Brintnall Co., Los Angeles, San Francisco, Seattle • A. E. Heinsohn Printing Machinery, Denver • Sears Limited, Toronto, Montreal, Winnipeg, Vancouver • Southeastern Printers Supply Co., Atlanta • W. G. Morgan & Sons, Inc., Atlanta • Western Newspaper Union, Tulsa, Little Rock, Okla. City, Shreveport • E. C. Palmer & Co., Dallas, Houston, New Orleans

# Letterhead Competition

## Sponsored by

*Enthusiastic reception by printing firms of the first Plover Bond Letterhead Competition has encouraged its sponsors to repeat the event in 1957.*

As in 1956, this year's Competition will culminate in an all-expenses paid "Wonderful Week-end in Wisconsin" for 24 Grand Award winners.

Competition sponsors and hosts for the gala week-end is Whiting-Plover Paper Company. This 65-year old mill, located at Stevens Point, Wisconsin, manufactures Plover Bond, one of the nation's top selling letterhead papers.

The Northernaire, world famous luxury resort in the wilds of Wisconsin's beautiful lake country, has again been selected by Whiting-Plover as fun headquarters for Competition winners.

### *3,000 Acre Estate*

Grand Award winners—12 printers and 12 paper salesmen—will start the long week-end with arrival in Stevens Point by chartered plane on Wednesday, September 4. They will see Wisconsin in its best Fall finery. Hardwoods from fiery reds to delicate russets, backgrounded by the greens of the coniferous family—pines, spruce and balsam—set the stage for a variety of activities at The Northernaire.

Dramatically situated on a 3,000 acre estate surrounded by 27 sparkling clear lakes, this remarkable resort offers everything from



Guests are impressed on mill tour with the Accu-Ray. This atomic age instrument insures uniformity of paper weight never before possible.

breakfast in bed to forays for almost legendary fish. Voracious Muskies, tackle-smashers extraordinary, are a real test of skill and courage.

### *Another Test of Skill*

To win a Plover Bond Grand Award is really quite simple. You don't have to be an experienced fisherman or inclined (or reclined) to have your breakfast in bed!

Established to pay fitting tribute to the "craftsmanship demonstrated on Plover Bond by printers, and of the services of distributor salesmen who sell Plover Bond," this Competition asks that you submit letterheads you have printed on Plover Bond.

Last year's Grand Award winners pose at Stevens Point airport upon arrival by chartered plane from Chicago.





# for Printers Again

## Whiting-Plover Paper Company

You can do this through your Plover Bond salesman. He will see to it that your entries arrive before the day of judgment. At that time, the panel of judges will objectively select the best 36 letterheads reproduced on Plover Bond. The best 12 are Grand Award winners; the next 24, Honorable Mention winners. Judging is based, equally, on quality of design and quality of reproduction.



After scenic bus ride through wonderful Wisconsin lake country, Grand Award winners get a rousing musical welcome at The Northernaire.

### Competition Rules

1. Commercial printers within the continental limits of the U.S.A. are eligible.



Golf on sporty Northernaire course whets appetites for gourmet-pleasing cuisine.

2. Entries must be printed on Plover Bond, Plover Bond Opaque or Plover Letter—by any reproduction method—and have been run between August 1, 1956, and up to the close of this Competition, midnight Sunday, June 30, 1957. Letterheads entered in the 1956 Competition are not eligible.

3. Printers may enter as many different letterheads as they wish, but 3 copies of each entry must be submitted.

4. One of the 3 copies of each letterhead entered must have the following information typed or legibly written on it: (a) Name and complete address of printing company; (b) name of individual authorized by printing company to enter letterheads; (c) name and complete address of paper dis-

tributing company from whom Plover Bond was purchased; (d) name of paper salesman who sold Plover Bond.

5. Competition begins January 1, 1957, and ends at midnight June 30, 1957. Mail entries to:

**PLOVER BOND Letterhead Competition**  
Whiting-Plover Paper Company  
Stevens Point, Wisconsin

As in 1956, Competition judges are *Howard A. Guernsey*, Whitaker-Guernsey Studio, Inc., *R. Hunter Middleton*, Director of Design, Ludlow Typograph Co., *Dr. Albert Sutton*, Chairman of the Graphic Arts Department, Medill School of Journalism, Northwestern University.



Golden Plover trophy, designed especially for this Competition, is awarded winners at Northernaire banquet.



# Now... AUTOMATION for your **VACUUM PRINTING FRAMES**

FINGER TIP CONTROL, SELF-LOCKING, PERFECT BALANCE

The Consolidated Automatic Vacuum Printing Frame was designed to make the platemaker's work easier; to produce more plates; and built to last till the end of time. Cover glass moves up automatically by push button control. Time is pre-set. Vacuum reserve tanks increase efficiency and maintain a uniform vacuum pressure at all times. There are no clamps or locks. The instant you tilt; you automatically lock.

There is no other frame the world over that meets the standards set by the Consolidated Automatic Elevator Printing Frame.



50" x 70"  
60" x 90"  
and up

*Built  
to last  
a  
Lifetime*



## **CONSOLIDATED MANUAL ELEVATOR TYPE**

with self-balancing cover glass, reserve tank, single lever lock, electric timer and vacuum stat control makes this economical printing frame the best in the low priced field.

Consolidated Printing Frames now in use in hundreds of leading platemaking plants, have gained the reputation that—you always buy right, when you buy CONSOLIDATED.

50" x 70"  
60" x 90"



28" x 38"  
40" x 52"

## **CONSOLIDATED MANUAL HINGED TYPE**

with oversize reserve tank, automatic control, spring balanced cover glass and dual spring pressure blanket, assures excellent printing frame operation. Built to last forever! Streamlined. A fine piece of equipment that your personnel will take great pride in operating. A little more costly; but a lot more value!

# CONSOLIDATED INTERNATIONAL

**EQUIPMENT AND  
SUPPLY COMPANY**

1112 N. HOMAN AVE. • CHICAGO 51, ILLINOIS • Phone BRunswick 8-4000

330 W. 26th ST. NEW YORK 1, N. Y. • 1430 VENICE BLVD. LOS ANGELES 6, CAL. • 1190 BENNINGTON ST. EAST BOSTON 28, MASS.  
PHONE ALGONQUIN 5-4950 • PHONE RICHMOND 8-3806 • PHONE EAST BOSTON 7-2921

• 24 MARKET ST. SAN FRANCISCO 11, CAL. PHONE EXBROOK 7-1521 •

**Announcing** ATLANTIC ENVELOPE BOND, a new, superior grade of Bond Envelope Paper developed by Eastern Corporation.

Here is a truly superior bond paper for envelopes . . . a distinguished addition to the fine line of Atlantic Papers already known to you.

Your customers will recognize and appreciate the top qualities inherent in the combination of Atlantic Bond Paper and Atlantic Envelope Bond . . . the qualities of *higher opacity, absence of warp, good adhesive characteristics, and the ability to lie flat.*

Write for samples of this new member of the Atlantic family of fine papers — Atlantic Envelope Bond. Once you see it, test it, try it, you're sure to specify Atlantic Envelope Bond every time!

# Atlantic Envelope Bond



## Atlantic Papers

PRODUCTS OF EASTERN CORPORATION, MANUFACTURERS OF QUALITY PAPER AND PAPER-CELL TULIP MILLS AT BANGOR AND LINCOLN, MAINE • SALES OFFICES, NEW YORK, BOSTON, PHILADELPHIA, CHICAGO AND ATLANTA

ATLANTIC ENVELOPE BOND  
ATLANTIC BOND  
ATLANTIC COVER  
ATLANTIC COVER  
ATLANTIC COVER  
ATLANTIC BOND



Modern  
reproductions  
call for ...

## **ANSCO** Reprolith Ortho Film

Why is *Ansco Reprolith Ortho* the ideal film for halftone making? Because of its high contrast and high orthochromatic sensitivity! Equally well suited for the handling of line copy, monochrome or colored, it also permits the use of filters to improve copy rendition, cut down on costly, time-consuming handwork on negatives. Like all Ansco films, it offers high resolving power . . . fine dot-etching properties . . . wide latitude.

For maximum density and contrast, use fast-working *Ansco Reprodol Developer*—available in dry powder mix units making 2, 10 and 25 gallons of solution. And for a hardening formula, you'll find *Ansco Acid Fixer* ideal!

ANSCO, Binghamton, New York. A Division of General Aniline & Film Corporation. "From Research to Reality."

**Ansco...**

graphically the finest since 1842

# "New" CYLINDERS For Old!

ALADDIN'S GENIE  
COULDN'T DO  
A BETTER JOB!

Arthur Tickle's "modern magic" takes worn or damaged printing press cylinders and rebuilds them better than new. Besides saving money on cylinder replacement, cylinders rebuilt by this process are more durable because of the increased hardness of the deposited metal (Hard Stainless Steel, High Carbon Steel, Monel Metal & 18-8 Stainless Steel). In addition, all cylinders are further checked for size, condition of bearers and journals and body runout in order to eliminate unnecessary work or discover hidden sources of future trouble. Cylinder journals, if scored or worn, are rebuilt with High Carbon Steel (363 Brinell hardness) and ground to standard diameter, with a resulting increase in the life of the cylinder.

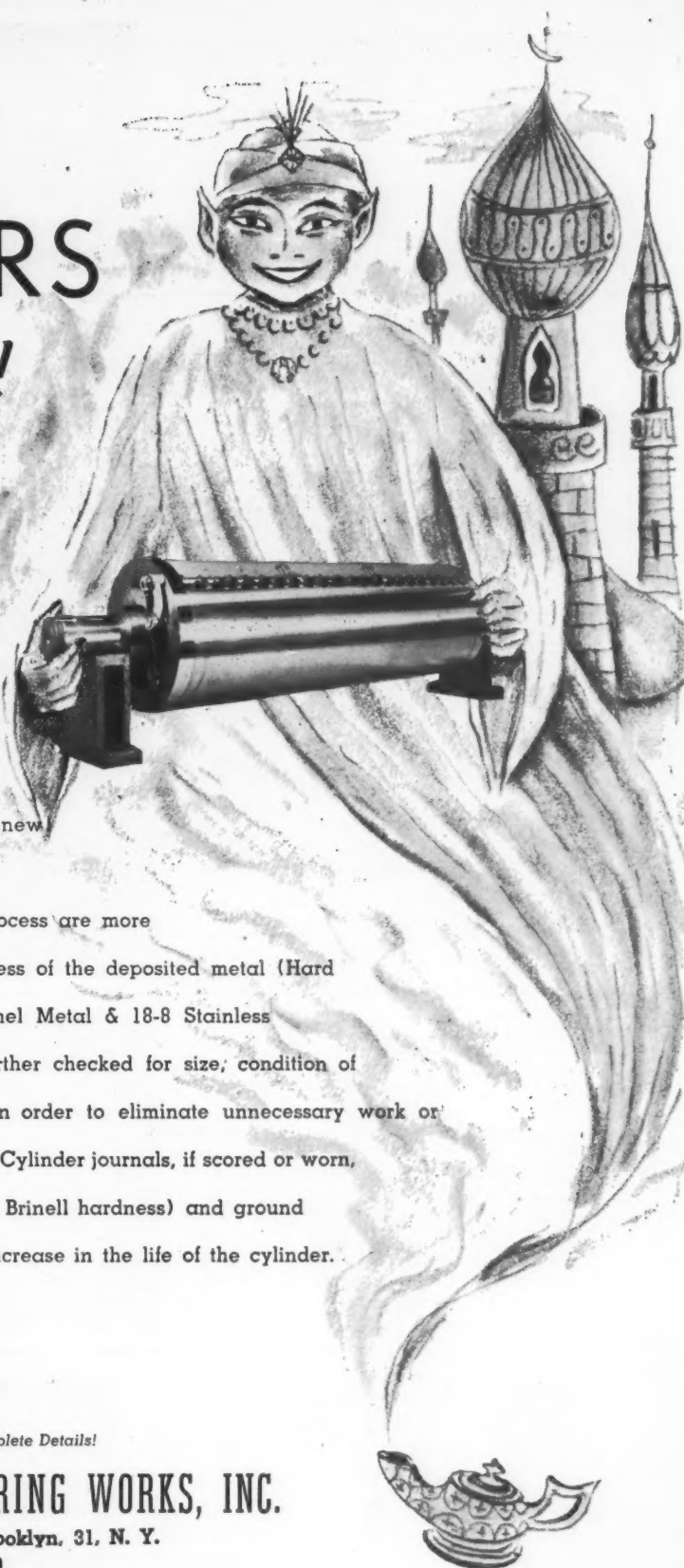


Write, Wire or Phone for Complete Details!

**ARTHUR TICKLE ENGINEERING WORKS, INC.**

21 Delevan Street • Brooklyn, 31, N. Y.  
MAin 5-4200

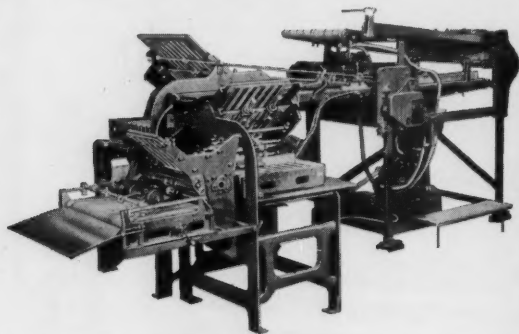
MODERN LITHOGRAPHY, March, 1957



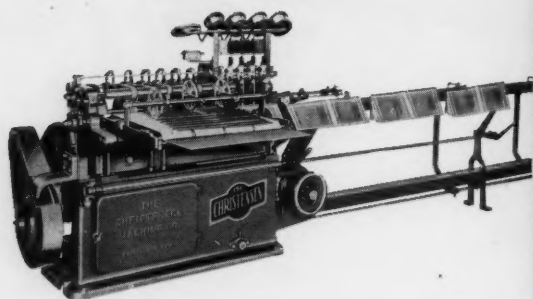


Machinery, built to do  
more jobs. better!

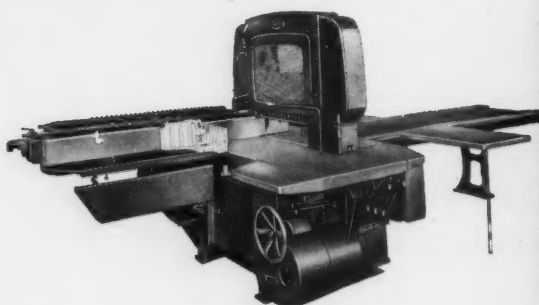
# Turn Printing into PROFITS!



**FOLDING** is the first step in achieving profits from pamphlets . . . and Cleveland Folders, available in a wide range of sizes, are the standard of the industry. Precision-built, of top quality materials and workmanship, every Cleveland is designed for many years of high-quality, high-speed production.



**GATHERING & STITCHING** of folded signatures is the next step to bindery profits. The Christensen Gang Stitcher, in the model best suited to your needs, will gather and saddle stitch as fast as operators can feed it . . . up to 7500 books or gangs per hour with McCain Automatic Feeders . . . with unvarying accuracy and reliability.



**TRIMMING** of stitched booklets is the final profit-making step before delivery. The versatile Brackett Safety Trimmer will trim booklets at more than twice the speed of guillotine cutters . . . and can, with minimum change-over, cut labels, form sheets, pads, flat sheets, etc. Work flows under the knife to a conveyor and wrapping tables, thus eliminating double handling.

ILLUSTRATED CIRCULARS ARE AVAILABLE  
FOR ANY OF THE ABOVE MACHINES



## DEXTER FOLDER COMPANY

DIVISION OF MIEHLE PRINTING PRESS & MFG. CO.

General Sales Office

219 East 44th Street

New York 17, N. Y.

9139



**TOM DEFENDS  
SMOOTH PLATES...  
JACK PREFERS  
HIS PLATES GRAINED,  
BUT...**

**...EACH AGREES  
HARRIS ALUM-O-LITH  
MICRO-SURFACED PLATES  
COMBINE THE ADVANTAGES  
OF BOTH**



There are undeniable advantages in both *smooth* as well as *grained* surface plates. But only Harris Alum-O-Lith Plates are **MICRO-SURFACED** (not smooth, not grained...but slightly micro-etched to combine the advantages of both surfaces.) Micro-surfacing allows longer, cleaner runs. Image lines and dots are embedded in the surface, completely protected from wear on all sides unlike conventional plates with projecting images. Micro-surfacing assures deep etch, unsurpassed fidelity, more latitude in ink and water control, quick and easy processing, higher profit on every job. Ask your dealer for a demonstration.

**HARRIS  
SEYBOLD  
COMPANY**

**LITHOPLATE, INC.** A Harris Subsidiary  
278 North Arden Drive, El Monte, California  
5308 Blanche Avenue, Cleveland 27, Ohio



*Advanced design pays off—for you. ATF Chief 22's quickly-set controls... automatic wash-up and self-lubrication... Adjustomatic stepless speed control and other exclusive features mean that...*

## **while other presses are being set up... it's off – and running up profits!**

Thinking of going into high-quality offset? Want to branch out from letterpress? Looking for the ideal job press in the 22" range?

Pressmen everywhere will testify to the fast and easy set-up, smooth operation and precision production of the ATF Chief 22.

Some like the advanced inking and dampening systems. Some like the wide range of stocks and sizes it handles. Some like the superior work for which it's famous. And *all* stress one major advantage:

**no press in its range touches  
the Chief 22 for fast getaway.**

**AMERICAN TYPE FOUNDERS**



200 Elmora Avenue, Elizabeth, N. J.

4495

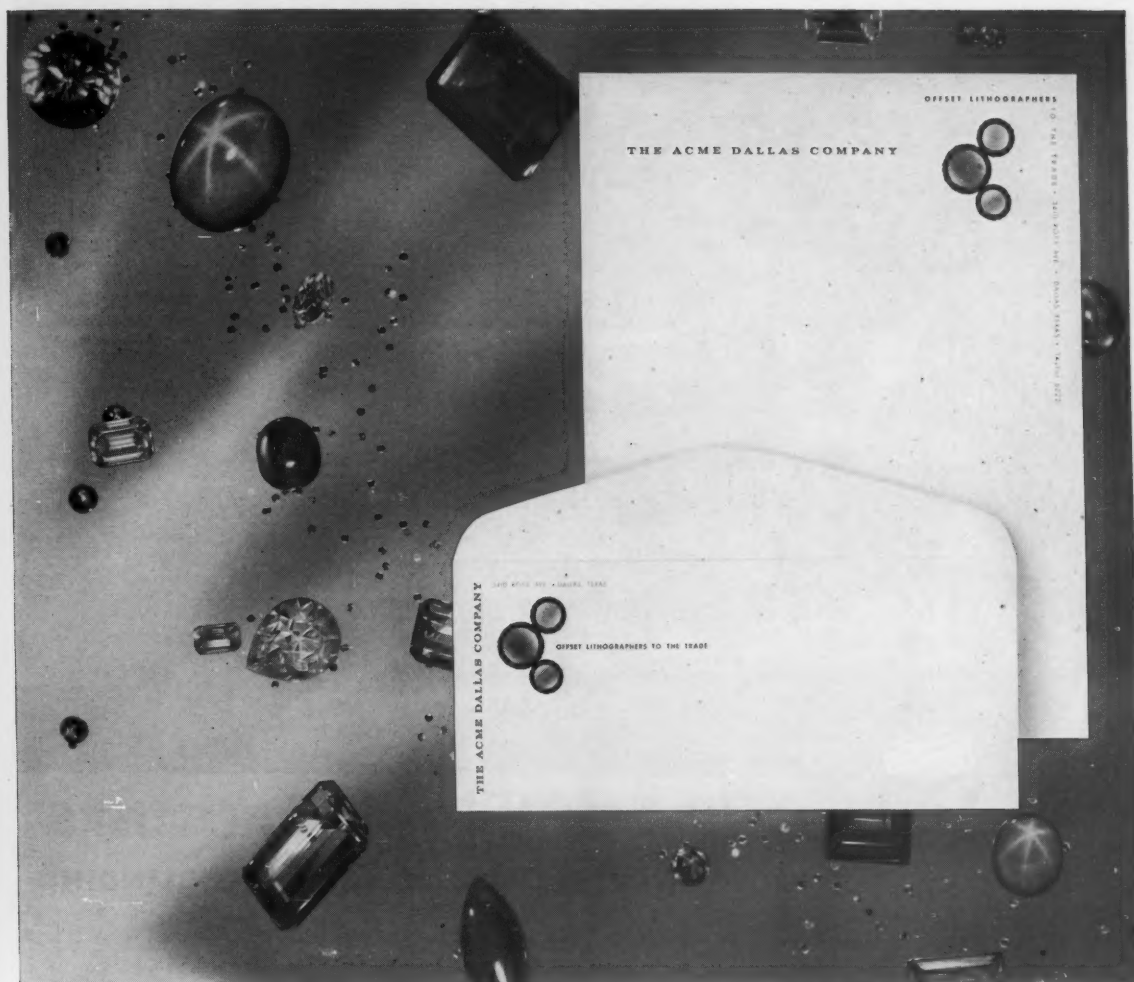
The Chief 22 is often in full production while other presses are still being set up—greatly increasing your output and profit on average offset runs.

Set it and forget it! The practical running speeds, teamed with sturdy construction and ease-of-operation insure one smooth run after another, job after job turned out with maximum quality and minimum up-keep problems.

Before you buy—check the field. We're positive that Chief 22's proved capacity for better printing—and more of it—will sell itself. For further information, drop a card, today, to:

**better, more profitable printing... from the most complete line of equipment**

# Brilliance....

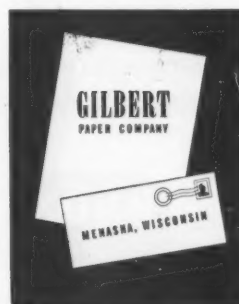


JEWELS BY TRABERT & HOEFFER, INC.

## Gilbert Papers

You'll find an unusual brilliance to Gilbert Quality Papers made possible by the carefully selected and specially processed new cotton fibres used in their manufacture. This brilliance is further enhanced, through tub-sizing and air-drying, by a rich cockle finish always associated with fine papers. In addition, Gilbert Papers are outstanding for strength, permanence and permit neat, easy erasures. Ask your Gilbert Paper Merchant for samples.

28 Full Pages of Gilbert Advertising reaching your best customers in FORTUNE,\* DUN'S REVIEW & MODERN INDUSTRY,\* ADVERTISING REQUIREMENTS, BEST'S INSURANCE NEWS, and OFFICE during 1957. \*FOUR COLOR INSERTIONS



**A GOOD LETTERHEAD IS ALWAYS BETTER...PRINTED ON A GILBERT COTTON FIBRE PAPER**

MODERN LITHOGRAPHY, March, 1957



I'm glad somebody finally  
developed a deep etch lacquer  
I can use on aluminum plates  
with  
**NO COPPERIZING**

Frankly, I always found copperizing a pain in the neck. Now, the Knox Soap people have come up with a plastic lacquer made to order for guys like me. The way they put it is, "the image is virtually indestructible". All I know is I haven't been able to blind a deep etch plate yet made with Little Benjy plastic lacquer. And I've tried.



## **LITTLE BENJY** *Plastic* **LACQUERS** **PRINT SHARPER, RUN LONGER, NO BLINDING**

Made in two types (for surface and deep etch plates) these revolutionary new formulas for lacquers exhibit unusually high bonding strengths. Ten to twenty times tougher than vinyls, Little Benjy produces a film of high flexibility, with a tremendous affinity for ink, and at the same time, an extremely high repelling to gum and water. These features, together with its self-leveling, smooth spreading ease of application make Little Benjy the lacquer that the industry has been searching for.

**SEND FOR FREE FOLDER SHOWING ACTUAL TEST RUNS OR SEE YOUR LOCAL DISTRIBUTOR**



**KNOX SOAP COMPANY**  
3300-22 WEST CERMAK ROAD  
CHICAGO 23, ILLINOIS

**PLASTIC SURFACE LACQUER**

**PLASTIC DEEP ETCH LACQUER**

**PLASTIC DEEP ETCH LACQUER FOR PLATES 54" OR OVER**

**KNOX-OUT RINSE**

**KNOCK-DOWN AND DRAG-OUT**

**LITTLE BENJY 1 STEP WASH-UP SOLVENT**

**LITTLE BENJY CORRECTION FLUID**





Clarity of color characterizes Fitchburg's offset papers. Clean, sparkling whites of unusual brilliance form a perfect background for reproduction. Tints, too, are as crisp and clean as a water color.

## MONTCLAIR VELLUM

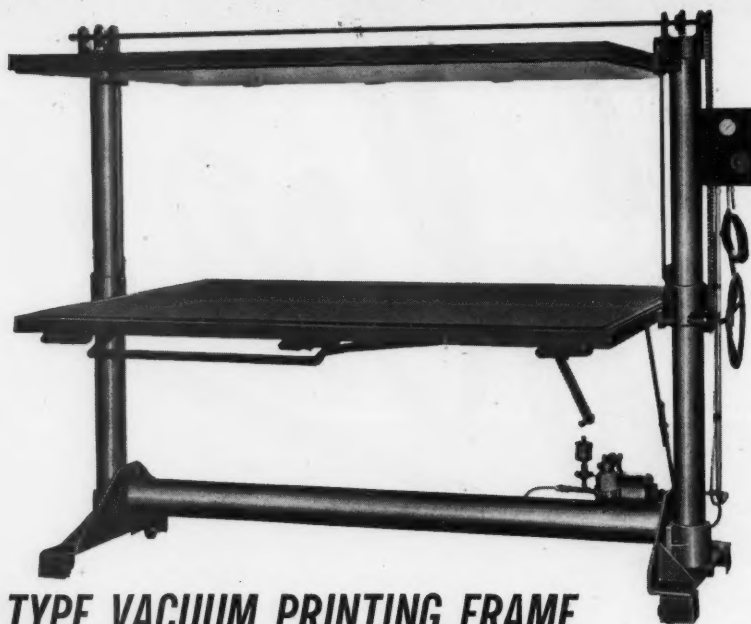


Here is the greatest sheet Fitchburg has made in 95 years of papermaking experience. A *whiter* white with a beautiful printing surface, excelling in every quality that a fine offset paper should have.

*Write to the mill for sample sheets and complete information on Montclair Vellum. It doesn't obligate you in the slightest degree.*

### Fitchburg Paper Company

MILLS AND GENERAL OFFICES: FITCHBURG 6, MASS.  
 NEW YORK OFFICE: 250 PARK AVE., N.Y. 17



*Zenith*

## ELEVATING TYPE VACUUM PRINTING FRAME

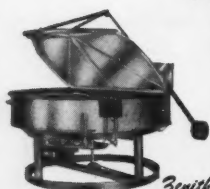
DESIGNED BY SPECIALISTS FOR THE EXACTING CRAFTSMAN

*Speediest operation is made possible by these Zarkin-Zenith features:*

- Automatic controls.
- Built-in vacuum reservoir for rapid contact.
- Floating rubber blanket permits use of either metal plates or glass.
- Perfectly counterbalanced for tilting and effortless raising of glass frame.
- Frames are fabricated of sturdy, welded rectangular steel; base of heavy welded tubular steel.
- Blanket frame drops away for easy glass cleaning.
- One motion secures all frame locks simultaneously for the utmost in convenience and safety.
- Mounted on casters for mobility.

*The most modern, best equipped plants across the nation use Zenith Vacuum Printing Frames.*

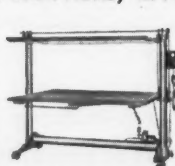
### ZARKIN-ZENITH—THE WORLD'S FINEST LINE OF PHOTO-MECHANICAL EQUIPMENT FOR LITHOGRAPHERS, ENGRAVERS AND PRINTERS



*Zenith*  
**PLATE WHIRLER**



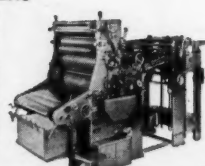
*Zenith*  
**PEDESTAL PLATE WHIRLER**



*Zenith* **ELEVATING TYPE  
VACUUM PRINTING FRAME**



*Zenith* **PEDESTAL TYPE  
VACUUM PRINTING FRAME**



**ROYAL ZENITH 29  
SINGLE COLOR OFFSET PRESS**



*Zenith*  
**TEMPERATURE CONTROLLED  
DEVELOPING SINK**



*Zenith* **DOWN DRAFT  
DEEP ETCH TABLE**



*Zenith* **LAYOUT and  
STRIPPING TABLE**



*Zenith*  
**PLATE GRAINING MACHINE**

**ROYAL ZENITH 29, Single Color Offset Press** — perfect companion to the Zarkin-Zenith line. Takes a BIG 23" x 30" sheet — at the profit-producing speed of 50,000 impressions per shift with top quality. Modern plants across the nation are using the Royal Zenith 29 to produce more profit-full jobs! And you'll be amazed at the surprisingly low initial cost!



# ZARKIN MACHINE CO., INC.

THE FINEST IN PHOTO MECHANICAL EQUIPMENT SINCE 1928

34-19 TENTH STREET • LONG ISLAND CITY 6, NEW YORK • AStoria 4-0808

## LETTERS to the EDITOR

### Quality Control

Dear Sir:

Our metal container licensee in Germany has asked that we obtain, if possible, a copy of the article "Quality Control in Printing" which appeared in *MODERN LITHOGRAPHY*, November, 1956, page 43.

C. E. Norton  
Continental Can Co.  
New York.

Copy of this article has been sent.—  
Editor.

### Foreign Reader

Dear Sir:

I received an application for admittance to the Southern School of Printing from Piraeus, Greece. A young man by the name of Nick H. Kasnakides wishes to take a general course in lithography.

One of the questions on our application blank is: "Through what source did you learn about our school?" His answer was "Reading *Modern Lithography*." I thought you would be interested in learning that your valuable publication is not only read by lithographers throughout the country; it is apparently read by future lithographers in foreign lands.

Charles E. Kennedy  
Southern School of Printing  
Nashville, Tenn.

ML has more than 500 foreign readers, in all parts of the world. It is nice to know that the magazine is appreciated.—  
Editor.

### Step and Repeat

Dear Sir:

We should be much obliged if you could help us with some addresses of manufacturers in the United States who make step and repeat machines.

H. Malmstein  
The Aller Press  
Helingsford, Sweden

A list of half a dozen manufacturers has been sent.—Editor.

### Color Process Booklet

Dear Sir:

I have been informed that *MODERN LITHOGRAPHY* has put out a pamphlet entitled "Elements of Color Process Reproduction," by Andy Perni. I wonder if you could send me one.

Samuel J. Birnie  
2100 Davidson Ave.  
Bronx, N. Y.

A copy of Mr. Perni's booklet has been sent. A free copy will be sent to any new

## In This Issue

● **THREE COLOR** offset has really been gaining momentum in recent months. No wonder. More and more lithographers have found that customers like it, not as a replacement for four-color process, but as a pleasing way to use color they couldn't previously afford. John Lupo starts a five-part series of articles on three-color direct separation in this issue, on page 36. His approach is practical, in the how-to-do-it style. Mr. Lupo will be remembered for his excellent series last year on photography.

● **CONVENTIONS** are with us again. Graphic 57 in Switzerland, is described on page 32; LNA, on page 41; and Southern Graphic Arts Association, on page 44.

● **IS MASKING** a cure-all? Z. I. Poharnok continues his provocative series on page 34.

● **WILL FLEXICHROME** fit into your shop operation? Turn to page 39 to find out. Elsewhere you'll find a practical discussion of opaquing techniques (page 42); a discussion of specks in prints (page 46); winners in a poster contest (page 49) and other features of interest.

subscriber to *Modern Lithography*. —  
Editor.

### Information on ByChrome

Dear Sir:

We are just about ready to open a printing plant and have noticed in your *Modern Lithography* magazine, January 1957 issue, the article about ByChrome vinyl plastic, which makes an excellent masking plastic.

We would appreciate all information on this product.

H. Canter  
Canter's Co.,  
Chester, Pa.

Your request for information has been forwarded to ByChrome Co., Inc., Box 1077, Columbus, O.—Editor.

### Copy Preparation

Dear Sir:

Please advise us where we can obtain a service, book or catalog containing pictures, drawings, reproductions or cuts which can be used for offset printing and duplicating. Thank you.

W. E. Schultz  
Schultz Laboratories  
Boone, Ia.

Following are several companies which supply drawings, reproductions, etc. There are many more. We suggest you consult the Yellow Pages of your phone book for more.

Acme Art Service  
258 Broadway  
New York 7, N. Y.  
The Craftint Mfg. Co.  
1615 Collamer Avenue  
Cleveland 10, O.  
The Howell Co.  
Central Bldg. 805 G Street, NW  
Washington 1, D. C.

### Offset Scrapbook

A. A. Archbold, Publisher  
1209 S. Lake Street  
Los Angeles 6, Calif.

### Seeks Clarification

Dear Sir:

I have read with interest the two-part article on "Color Scanning and Photo-Mechanical Separation" (*December ML*, page 61 and *January ML*, page 73).

Reading it all with attention I found some of the author's ideas quite confusing. There being a great deal of loose talk in the field, I take the liberty to point out some of his statements and instructions which I think need further explanation. (*Jan. page 73, col. 3*) "... This mask should be an unsharp mask ... it has a density range of about 40 to 50 percent of the original transparency."

The author does not say whether this mask should be made from the transparency (a contact negative) or from the separation negative (a contact positive). If a negative, then it ought to be registered on the separation negative and, possibly, with a high-light mask added. The result would be a screen positive with no color in the middle-tones up to at least step No. 6 and with a quite heavy load in the shadows. It could not work.

If it were a positive, then it would flatten out the image to an extreme degree because a separation negative thus masked would have about .90 density in the white and close to 1.70 in the black end of the scale. I wonder what he meant?

(Page 74, 1st col., next to last paragraph): He suggests a black printer to be made by single exposure "or by single mask ... In accomplishing this function

(Continued on Page 149)

# COPPER the base for many *Beautiful Things*



PHOTO COURTESY POOLE SILVER CO.

## LITH-KEM-KO COPPER BASE for ALUMINUM for the *Most Beautiful* OFFSET PLATES you've ever seen . . .

A famous poet once said, "A thing of beauty is a joy forever". That's why many beautiful silverplated items have a copper base. Copper adds long life to silver — just as it adds long life to offset plates.

Lith-Kem-Ko Copper Base for Aluminum chemically deposits a layer of copper to the image area of the plate, giving a strong image — one that will run up to half a million impressions. For beauty of finished sheets, for long, trouble free runs — start using Lith-Kem-Ko Copper Base today.

### PRICES

1 gallon . . . . .	\$6.50
4—1 gals., per gal. . . . .	6.25
12—1 gals., per gal. . . . .	6.00

Write for your copy of the LITH-KEM-KO Catalog. It gives complete information on products and instructions on platemaking.

**LITHO CHEMICAL  
& SUPPLY CO., INC.**

46 HARRIET PLACE - LYNNBROOK L. I., NEW YORK  
1506 SANTA FE AVE. - LOS ANGELES, CALIFORNIA



## EDITORIALS

### *For Better Litho Clubs*

ONE of the most noteworthy things that came out of the recent Council of Administration meeting of the National Association of Litho Clubs was news of a special information service to be inaugurated at the forthcoming convention of NALC in Chicago May 2-4.

Three committees were formed to deal with specific problems of local clubs in these areas: administration, education and social activities. Leading lithographers from around the country were chosen to head the groups and to select committee members. The three units then will conduct the afternoon session of the convention on May 2.

We hope that the committee members will give serious thought to their work and will be ready to offer well considered advice on the basic, month-to-month problems of every litho club. These are the problems of running a club efficiently, of attracting interesting speakers who have something educational (and, if possible, entertaining) to tell to lithographers, and of setting up social functions that will be enjoyed by the club members, while not detracting from the primary purpose of any litho club: *to provide educational material on lithography and related subjects and to provide a meeting place where lithographers can discuss their mutual problems in the friendly atmosphere of the dinner table.*

Of recent years, it has been obvious that some of the litho clubs have strayed from this function and have embellished their meetings with diversions that are pleasant but neither contribute to the growth of the clubs nor increase their usefulness to members.

Such things as "old timers" nights, Christmas parties, ladies nights, installation of officers, and

other activities are necessary adjuncts to the educational side of the program.

But look at it this way: Most litho clubs meet only nine months of the year, suspending for the three summer months. If entire programs are devoted to the four above-mentioned topics, and if January is dropped from the schedule because of Printing Week, there are only four dates—less than half—left for *real* litho meetings.

Perhaps this is an exaggeration, because not all clubs take a full meeting to handle these special occasions. But it is ML's feeling that such affairs are not as well integrated as they might be. Why not, for instance, invite the ladies to the Christmas party and thereby gain a meeting? How about having the old-timers reminisce for a minute each (not 15 or 20) after a brief installation ceremony, then get on with the speaker for the evening. That would save one or two more meetings.

These are just suggestions. Doubtless the three NALC committees are better qualified to make practical suggestions of this type. They might also offer profitable suggestions on increasing membership (and *attendance*); obtaining programs on new developments while the developments still are new; distributing technical literature to club members and getting it *read*; and many other subjects, including liaison between clubs.

In an editorial last June, ML commented on the fine way NALC had weathered three important organizational problems. With these storms safely past, the organization can go into its 12th annual convention with full attention on its main reason for being—to help the local clubs.

Not that all of the national organization's troubles are behind it. For, after the May meeting, NALC will be a teenager, and you've got to expect a certain number of growing pains at that age.★



## ***Graphic 57 June 1-16 In Switzerland Will Show International Equipment***

**A**S the date for the International Exhibition of Printing Industries and Allied Trades approaches, considerable interest in the exhibition—known as Graphic 57—is being generated in the United States and other countries.

The exhibit will bring together at Lausanne, Switzerland, important manufacturers of printing equipment, paper and ink, and other allied products.

Graphic 57 will run from June 1-16 and it will occupy one of Europe's most up-to-date exhibition centers, the grounds and building of the Swiss Autumn Fair.

The exhibit buildings cover a wide terrace overlooking the city of Lausanne and Lake Geneva. Fair grounds consist of well over a million square feet. The vast halls and pavilions surround beautiful landscaped gardens. Most of the exhibit space already has been booked by European and overseas manufacturers.

The indicated success of Graphic 57 is laid to two causes: the whirlwind pace of the graphic arts, including especially lithography, which generates interest in new equipment and materials in all parts of the world; and the beautiful natural setting of the exhibit city which is just a half hour's drive from Geneva.

Lausanne is situated centrally in Europe and is easily accessible by train and plane from all major European cities. In addition, New York is just 15 hours away by plane and Los Angeles is 25 hours away.

A section of the Swiss Association of Master Printers has organized the

exhibition. It is expected that more than 200,000 visitors, some 40,000 of them from foreign countries, will visit at Comptoir Suisse, as the Lausanne national fair is known.

### ***Three Sections***

The exhibition will consist of three general sections:

1. Production machinery and equipment for all printing processes including lithography, letterpress, aniline and silk screen.

2. Raw materials, including paper, cardboard and inks.

3. A special exhibit of finished products including printed matter of all kinds which was produced in Switzerland.

Additional displays, which will be of special interest, will show, among other things, the most outstanding creations of advertising art, the making and printing of a daily newspaper, carrying out of various printing operations, etc.

The stated objective of Graphic 57 is to stimulate technical progress in the graphic arts and at the same time to popularize and give information on the subject. The committee planning the exhibit declares in a press release that it will be of interest not only to members of the industry in Switzerland and abroad but also to the general public. More than 300 machines will be shown actually in operation. The budget for the organizing committee exceeds one million Swiss francs (about a quarter of a million dollars).

Concurrent with a portion of the exhibit will be the Ninth International

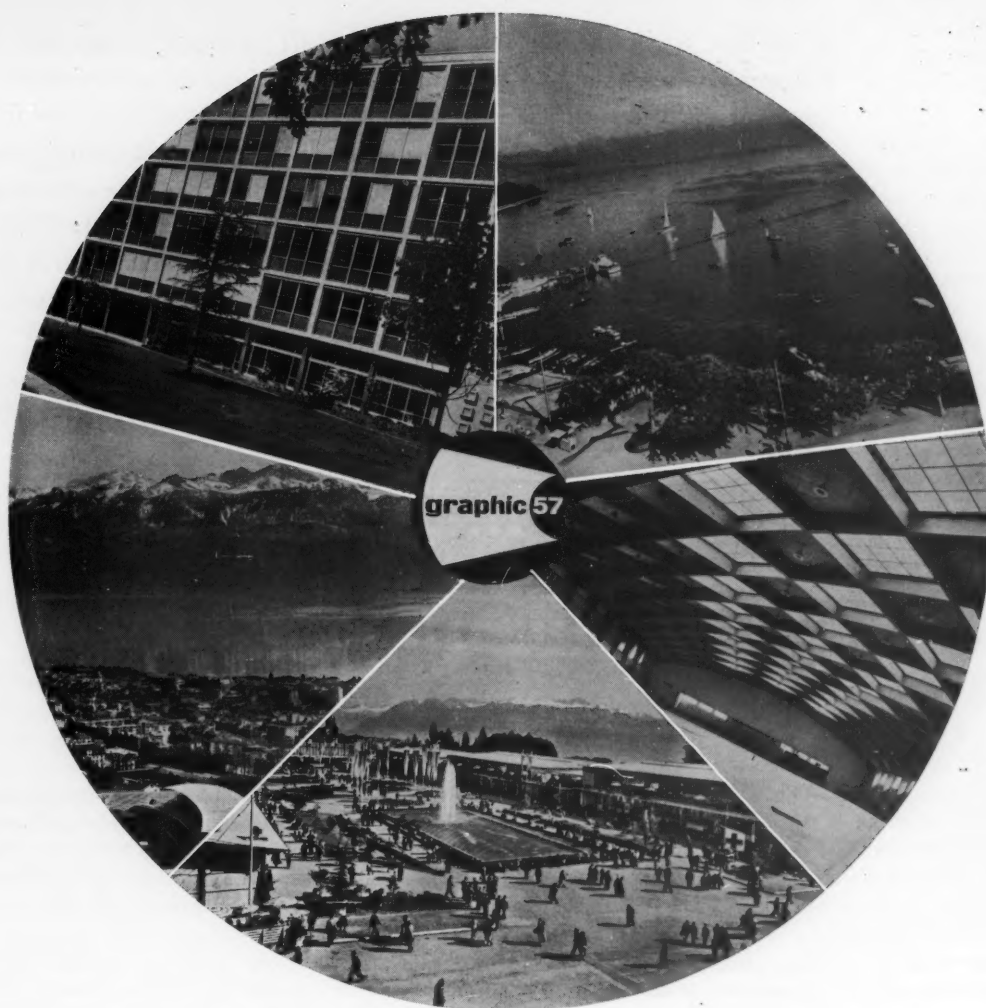
Congress of Printing Industries and Allied Trades which will be held in Lausanne June 3-8.

### ***U. S. Exhibitors***

Many United States companies already have been listed among the exhibitors at Graphic 57. Among them are Amsterdam Continental Types, Graphic Equipment Inc., Russell Ernest Baum Inc., Consolidated International Equipment and Supply Company, J. Curry Mendes Corporation, Kodak S. A., The Ludlow Typograph Co., Mergenthaler Linotype Co., Miehle Printing Press & Mfg., Minnesota Mining & Mfg. Co., F. B. Rosback Co., Vandercook & Sons Inc., and Sinclair & Valentine Co.

Benjamin Sugarman, president of Consolidated International Equipment and Supply Co., of Chicago, one of the exhibitors at Lausanne, recently told MODERN LITHOGRAPHY about an advance trip he made to Switzerland last November. Mr. Sugarman told in great detail about the beautiful layout of Lausanne, the distinctive nature of the buildings and grounds, and some of the sights to be seen around Lake Geneva and nearby parts of France.

Describing the section of the exhibit hall devoted to offset presses Mr. Sugarman said, "Here you will see the outstanding offset presses of the world, each vying for recognition as the world's finest offset press. It is the writer's belief that the greatest evolution in Europe during the next decade will be in offset. Great change is taking place now in thinking and planning of both letterpress



*Typical scenes in and around Lausanne, Switzerland: Lower photo shows the garden and buildings which will house Graphic 57. This part of the city commands a view of Lake Geneva and the Alps. (Clockwise) "Uptown" Lausanne is the only part of the city that slopes down to the water below. In foreground is part of new Olympic*

*stadium. School of Typography of Western Switzerland is a good example of modern architecture. Little port of Cuchy, cool and calm on hot summer afternoons, lies at the foot of the hills around Lausanne. Interior view of one of the huge exhibition halls for the international display of graphic arts equipment. Arch type construction is unique.*

equipment manufacturers and letterpress printers."

#### **Clean, Modern Plants**

Mr. Sugarman also mentioned the "clean, modern and efficient printing plants which will surprise and astonish you when you consider that Switzerland is a country of only five million people . . . we in the United

States can learn much from these visits and just one new good idea may be worth the entire cost of the trip."

A wide variety of accommodations for visitors to Lausanne has been worked out by the Graphic 57 committee. Visitors will have a choice of hotel accommodations in Lausanne or in nearby towns and rooms in pri-

vate homes in the Lausanne area. Rates and other data are available from the reservation service of Graphic 57, the mailing address for which is P. O. Box St. Francois, 1653 Lausanne, Switzerland.

U. S. lithographers intending to make the trip to Switzerland are advised to make early reservations for the exhibits.★

In his first article in this three-part series (*ML*, February, page 30) author Poharnok outlined the background and reasons behind the popularity of masking. In this article Mr. Poharnok, who is a color analyst and dot-etcher for Lord Baltimore Press, Baltimore, tells "what I experienced as standard principles and practices in visits to many dot-etching departments." He is writing this series to refute what he considers to be a widespread notion that masking eliminates handwork. "*Masking is efficient as a means of correction but it is not a cure-all*" Mr. Poharnok's provocative opinions are, of course, his own. Comments of other readers are invited.

## Let's Face It:

Part II

# The Guide In Masking

By Zoltan I. Poharnok  
Color Analyst, Lord Baltimore Press

**P**HOTOGRAPHIC masks are efficient as a means of correction. That is the consensus of a number of color-cameramen I have talked with. Masks can be, and are, made on the basis of certain established standards arrived at by extensive knowledge concerning the densitometric measurements and characteristics of the separation negatives which are the results of (a) the set of filters used; and (b) exposure and processing.

It is generally believed that with the broad-band filters (A, B, C5 with either K2 or combined exposures through the first three) the negative images have a constant degree of overlap between colors. Once that constant (as a mean of percent ratio) has been established in conjunction with exposure and developing time, the excess in the color-potentials can be calculated quite correctly.

Consequently, the operator also can establish the optimum density level for both the highlight and color-corrective masks. A fairly common practice is to make the highlight mask(s) with a 20 to 25 percent umbrella for the light end of the scale. The yellow reducing mask—made by contact exposure from the red negative—usually is about 30 percent; the red-reducing one, made by contact exposure from the blue negative, usually is 35 to 40 percent at the "black" end. In some specific cases other types of masks may be made (magenta for contact from transparencies, etc.) but the aforementioned standards are, to my experience, the most widespread and common.

Magenta masking is not very popular in general, because of the rather involved procedures. The theory is that for the yellow the D-maximum should be around 1.50 and for the red it should be around 1.30 or so.

I do not intend to elaborate here on every facet of these theories and practices nor to describe how to make any kind of mask. I wish only to throw some light on the general practices to see whether they can stand up under the stress of critical inquiry.

### The Standards

With the broad-beam filters, there is a considerable overlap in the color-potentials. The excess must be reduced. But when we assume that those excesses are constants in the form of percent ratios, we step into deep waters. The density of a separation negative is not dependent solely on filter, exposure and developing time (distance, light-source, temperature and agitation included).

There is a very important factor that can not be ignored: the surface characteristics of the original copy. A matte tempera ('poster-color') surface is a great deal more absorbent than is a flexichrome or even a carbro and thus the ratio of reflected light is governed to a big degree by that factor. The mask-density maximum that is adequate for a tempera original will be deficient in one way or another for other copies. Also, even with a 30 percent highlight mask we may adversely effect the very delicate light values in a thin water-color image—practically ruining that area. We could go on and on, ad infinitum, listing situations in which standard ratios could not do any good at all.

The answer is, of course, that one must not adhere to any rigid standards but, instead, should take densitometric readings from each negative, then make the masks



to fit the actual situation. Obviously, that takes quite some reading and computing. However, it is time well spent indeed.

Assuming that the masks, adequately plotted and made, take care of the two extremes of the value range, we can register them on the negatives and proceed with the screen exposures. But, are we sure that the exposures and positives will give us what we want all along the line?

### **Corrections We Can Expect**

Let us take an average set of negatives, separated for the masking practices I have mentioned. The basic idea is to have identical scales and D-ranges. Supposing that the scales have a top limit (white) of D 1.60, a low limit of .30, there is a D-range of 1.30 for each negative. (This age-old principle somehow has managed to survive all the turmoil of progress.)

A 25 percent highlight mask would amount to D .40 in the white (catch-light spots) resulting in a D total of 2.0 there; at step No. 2 it would be approximately .30, at No. 3 about .20 and at No. 4 about .12, dropping at No. 5 to something in the neighborhood of .06. We can expect elimination and reduction of color—also an increase in contrast—from No. 1 to No. 4 of the short scale. Now, a 30 percent color-removing mask for the yellow (made from the red negative by contact exposure) is to be understood not as 30 percent of the low-end density (that would be only .09 in this case) but 30 percent of the “white” end D., or, in this case, .48. The total at that end would amount to .78 or .80. That represents an average of 65 percent screen-dot value. However, the steps from No. 10 back would also be increased, by increments like these: No. 9 by .40, No. 8 by some .28, No. 7 by about .16 and No. 6 by .09. At No. 5 we would find an increase of about .03 or so, which is nothing to worry about.

With this corrective mask we thus would affect steps from No. 10 to No. 6 inclusive and, naturally, the values that are represented by these steps of the wedge scale. With these influences, contrast would diminish too; the yellow positive would be sharp at the light and quite flat in the dark ends. As a matter of fact, flattening would be noticeable from the 50 percent values up, sharpening from the whites down to about the 30 percent values. The area in between these limits would remain unaffected by masking.

### **Many Questions About Color Arise**

Perhaps this is exactly what we want. But, perhaps, we have some warm greens of middle-tone value in the image where the red negative remained somewhat thinner than ideal because of the broad-band filter (B). Is it an advantage to reduce the yellow there to the above ratio? Also, there may be some very delicate ocher blends in the light areas. Is it an advantage to eliminate yellow there? How about light skin color? These are quite legitimate questions but of only relatively minor significance compared to what would happen to ultramarines and black. These are the very real danger-areas that

necessitate hand correction because the photographically produced masks are not detail-selective. Only hand-correction, with human intelligence and experience behind it, can do that kind of job.

It is quite obvious that no standard ratios would do the job even though in some instances one could get away with “approximates.” When a customer wants to advertise his product, paying a pretty high price for the printed matter in color, approximates do not satisfy him nor his advertising agency. They want facsimile, not an approximate.

Masking by standardized routines, as I found it is practiced in a majority of shops today, can satisfy only mass-producing patterns such as medium and low-grade illustrated magazines and the un-sophisticated sections of the public who buy those products. When it comes to quality, masking, to be efficient, is a very meticulous and time-consuming job.

Of course, with more adequate filters and with a sensible series of density-maxima adjusted to individual filter-spectra, a better job could be done. In addition, under these conditions the chances for color-corrective masks are very small. We would not need them except in some rare instances. The highlight masks would do a fine job indeed in the touchiest areas. In the strongly colored details a small amount of staining or even pencilling would (and is) entirely satisfactory and efficient, at very low cost in time and labor.

Don't write off those “ancient” methods of correction. They are valuable indeed no matter how “outdated” some may think them.

### **What Happened to Copy?**

We have seen that masking is based on information obtained from the evaluation of the separation negatives and filter characteristics. The question arises: Why? What happened to copy? How could any operator be sure of what he wants unless he knows what chromatic and tonal values the original contains? Furthermore, how can he know how colors will appear to the eye when broken down with various tint-values on the stock used for the job? These are questions we cannot ignore, although I have found no evidence of true concern in most litho shops. Copy values usually are tentatively set by guessing and as far as the inks are concerned, the best we could find was complementary-filter reading of base-color to ascertain identical coverage in proof and press sheets. That is far from enough. I will discuss this aspect in the concluding article next month.★

---

Next Month:  
*Author Poharnok concludes  
his three-part series with*

## **The True Basis for Masking**

# 3-Color Direct Separation

## 1. Introduction to Color

By John M. Lupo, Jr.

Technical Representative  
Di Noc Photographic Division  
Di Noc Chemical Arts Inc.

THE typical children's fable begins with the statement "Long, long ago. . . ." Strangely enough, the story of color separation starts long, long ago, too, in the year 1802. At that time the theory of tricolor vision was given, but it was not applied practically until 1861. In that year a 30-year-old physicist professor in London, James Clerk Maxwell, stated that virtually any color can be matched by a proper combination of red, green and blue light. He demonstrated proof of this statement by the use of three color glasses and three "magic lanterns" (or slide projectors as we would now call them). Of course at that time such a statement, even with the proof of its workings, was difficult to understand and accept. Maxwell probably was thought of as some master magician or lunatic. Maxwell's theory is extremely important to an understanding of color, and we will start this subject by discussing it in some detail.

### Theory of Color

Suppose we set up three slide projectors. In one we place a red filter, in the next a green filter and in the third a blue filter. Now arrange the projectors so the projected image will duplicate that shown in Fig. 1. We can see from this that the three colors, when in equal proportions, yield plain white light. Where red light overlaps the blue light, we get magenta. The combination of green and blue

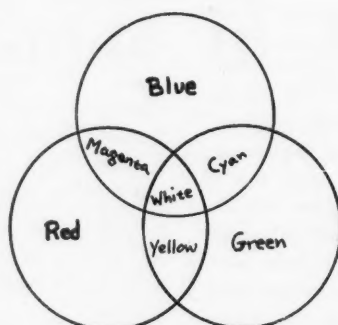


Figure 1. Additive process of color. Red and blue light combine to make magenta. Blue and green form cyan. The three colors—red, blue and green form white light.

light yields cyan. Yellow is produced with the green and red light. You probably think it strange that a combination of green and red light will yield yellow. These color combinations occur however *only when you use projected light and not when you print with pigments.*

This theory of color combination by projected light is known as the additive process of color, and the colors red, green and blue used in this process are referred to as *primary colors*. The colors formed by the mixture of these colors: namely, magenta, yellow and cyan are then considered as *secondary or complementary colors*.

At times you have heard a description of a color as being *minus* another color. Fig. 2 illustrates graphically this point. We see in the left hand

column that white light consists of red, blue and green. Yellow consists of red and green and has no blue. We can then say that yellow is minus blue. Magenta is made up of blue and red light with no green, and therefore we can refer to magenta as minus green. Cyan is considered as minus red.

This may at first seem confusing so let us consider it in another way. If we add the minus color to the mixture we end up with white light. For example, we have seen that red and blue make up magenta. Now if we add green to that we would have red, blue and green which would give us white. The same applies to all the other colors. When we add the minus color we get white. From this theory of additive color the important points to remember are the following:

*White light is made up of the three primaries: red, green and blue light. Secondary or complementary colors of magenta, yellow and cyan are formed with mixtures of these primaries. A complementary color is one that when added to the mixture will give white.*

### Subtractive Process of Color

The subtractive process of color is used for all types of printing reproduction. It involves the use of the secondary colors, yellow, magenta and cyan. In Fig. 3 we can see the effect of printing these colors on

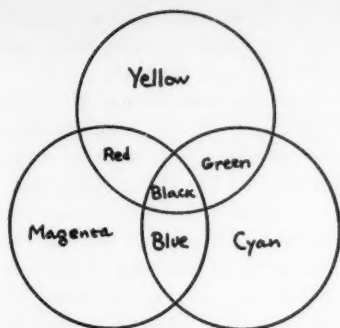


Figure 3. Subtractive process of color. Magenta and yellow form red. Cyan and yellow form green. The three colors—yellow, magenta and cyan form black.

paper. Red is formed by the blend of magenta and yellow. Green is produced by cyan and yellow; and blue by the combination of cyan and magenta. When all the colors are printed together we have a complete absence of color which we refer to as black. Remember that white light consists of all color and black is the absence of color.

It is important in our discussions that you fully understand two terms that are used to describe color. These terms are *absorb* and *transmit*. If we were to take a sponge and soak it in water, we know that the sponge would absorb the water, and when taken out of water we would not be able to see the water in the sponge. The same thing happens with color when it is absorbed. When we refer to a color absorbing another color we mean simply that the absorbed color disappears. We say that a color is transmitted when the paper reflects that color to us.

As an example of these terms let us go into further detail. In Fig. 1 on the additive process we said that green and blue light make up cyan.

From Fig. 4 we find that cyan is complementary to red, because when

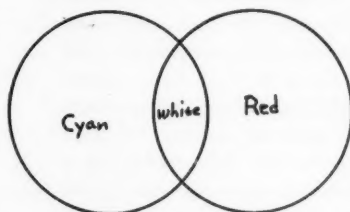


Figure 4. Red is complementary to cyan, for when it overprints (by projected light) it forms white. Compare this with Figure 1.

red is added to cyan the result is white. We can then say that cyan absorbs red (since we cannot see the red) and transmits (which we can see) green and blue. We have listed in Fig. 5 the absorption and transmission of the primary and complementary colors for you to study. The

Fig. 5

COLOR	ABSORBS	TRANSMITS
Red	Green and blue	Red
Green	Red and blue	Green
Blue	Green and red	Blue
Cyan	Red	Green and blue
Magenta	Green	Red and blue
Yellow	Blue	Green and red

importance of learning these characteristics cannot be overemphasized, for it is the key to the understanding of color, masking and color separation. We achieve the sensation of color because of this absorption and transmission. We refer to an object as red because the red absorbs the green and blue light and transmits red. If we were to examine this object under a blue or green light it would appear black because it would not reflect (or transmit) any of these colors. Study this statement by re-

ferring to the subtractive process in Fig. 3.

We can see from the subtractive process that it is theoretically possible to print black with the combination of yellow, magenta and cyan. The basic problem involved in this procedure is the correct type of inks, so that their combination will print the primaries in their proper color value together with sufficient density of all colors to show a dense black. In the past few years, ink manufacturers have been able to solve this problem, thus stimulating the gradual growth of three color reproduction. Three color was initially used for short run color on Davidson and Multilith presses, but has since been expanded to presses of every size.

#### Filters and Their Action

The main idea of color separation is to separate from the original transparency or art work the colors necessary for reproduction. These colors are those of the subtractive process; namely yellow, magenta and cyan. In the case of four color process, the colors would be yellow, process red,

Figure 2. Chart showing how to refer to one color by expressing it as minus another color. White light consists of all other light; yellow is minus blue; magenta is minus green; and cyan is minus red.

COLOR	Red	Blue	Green
White	✓	✓	✓
Yel.	✓	minus	✓
Mag.	✓	✓	minus
Cyan	minus	✓	✓

process blue and black. This separation of colors is achieved by the use of colored filters and is a further explanation of absorption and transmission.

Let us assume that Fig. 6 is a color



Figure 6. Color transparency with color blocks of yellow, red, blue and black.

transparency. Now we will see the effect of different filters on this subject. If we were to place a blue filter over the lens or light source and expose this to a panchromatic film, the blue filter would make all the yellow appear as black to the film. Consequently, all the areas in the transparency which were yellow would then appear as white on the negative, and the other colors would show as



Figure 7. Negative made with blue filter. Yellow and black appear as white on negative. Red and blue appear as black on negative.



Figure 8. Positive print of negative in Figure 7.



Figure 9. Negative made with green filter. Note that only the red and black blocks are white. Yellow and blue show as black.



Figure 10. Final printing of Figure 9. Only the red and black blocks print.



Figure 11. Negative made with red filter. Note that only the blue and black areas appear as white on this chart. Yellow and red appear as black.



Figure 12. Final printing of red filter negative. Blue and black print in their respective blocks. (Note The illustrations from Figures 7 to 12 are used only to establish the workings of different filters. Actually there is a certain contamination of other colors in the different color blocks. This subject will be further covered in the article on masking.)

black on the negative. (Fig. 7.)

When we go to printing, the white areas of the negative would print as black and the others would not. The final printing would then have only yellow in the yellow and black blocks, as shown in Fig. 8.

The green filter absorbs all red and blue and the result of this negative is shown in Fig. 9, the final printing in Fig. 10. The red filter absorbs green and blue and the result of this negative is shown in Fig. 11, and the final printing in Fig. 12. Notice that the color block of black carries an equal proportion of all colors which, when added together, make up the complete absence of all color, black.

The important points to remember are these:

1. The blue filter makes the yellow photograph as black to the film. The separation from this filter is used to print yellow.
2. The green filter turns magenta black, and is used to print magenta.
3. The red filter turns blue black and is used to print in cyan.

It is important in color to use different types of films and developers to achieve desired effects. A typical set of separations may involve the use of as many as five different types of films, consequently an understanding of color separation would be incomplete without some details on this topic.

For the purpose of this discussion

let us divide film into two general categories, high contrast films and continuous tone materials.

**HIGH CONTRAST FILMS.** This type of film contains the standard litho type emulsion. It is used in every litho shop for line and halftone work. It is referred to as high contrast, for it shows on the negative only the extremes of white and black. It records none of the intermediate tones of gray. This type emulsion is made in both panchromatic and orthochromatic sensitivities, and the main uses of it in direct separation are for highlight masking and separation negatives. It has very limited uses for principal masks, because of its short scale. Typical of this type of emulsion, are the following brand products:

**Dinographic Process Pan.**—High contrast pan, coated on a dimensionally stable .010" thick polystyrene base.

**Dinolith Plus Ortho.**—High contrast ortho, coated on a low shrink acetate base.

**Dinolith Ortho Polystyrene Base.**—High contrast ortho, coated on a dimensionally .005" thick polystyrene base.

**Dinographic PN Ortho.**—High contrast ortho, coated on a dimensionally stable .010" thick polystyrene base.

**AnSCO Reprolith Pan.**—High con-  
(Continued on Page 123)

## First Article In a New Series

*This is the first in a new series of five articles on DIRECT COLOR SEPARATION. The author will cover, from a beginner's point of view, a step by step procedure for making direct separation negatives. This first article describes the Theory of Color. The second article, Controls in Color, will describe the densitometer and its uses, together with other equipment necessary for color separation. The third article, Masking for Color Separation, will illustrate the need and use of highlight and principal masks. Next, Making the Separations, will give the complete procedure for three and four color direct separations. The final article, Proving and Printing, will cover the methods available for simple proving and the controls for printing. The fifth article will also contain an insert of a subject lithographed on a small offset press in three and four colors. The reverse side of the insert will also give a synopsis of the procedure for direct color separation.*



*Relief image is applied to the paper, or final backing. The artist has the actual print in his hand, on a very thin emulsion. Work is being done by artist in Todd Studios, St. Louis.*



**Todd Studios In  
St. Louis Uses**

# FLEXICHROME

*for quick, accurate, low-cost conversions*

**By Mildred Weiler**  
St. Louis Correspondent

**W**HAT would you do if a customer wanted—in the middle of winter—growing spinach illustrated, for a seed catalog? The spinach, of course, has to look appealing to growers and be shown with a brown background and a summer sky.

It's fairly simple if he hands you an excellent color transparency or good art work, but all this fellow has is a good black and white photograph. As he hands you the photograph he also asks you to complete the job next week.

And so you do it. Fantastic? No, not if you use the Flexichrome process. Todd Studios in St. Louis handled this specific problem, as it has many others since the company pioneered in the use of the Flexichrome process in St. Louis about four years ago.

## **How Flexichrome Works**

Here is how it works: From a black and white photograph a black and white negative is exposed onto Flexichrome stripping film. The film then is processed to form a gelatin relief image in which the silver is replaced subsequently with a black dye known as the modeling agent. The black-dyed gelatin relief image adheres to a thin surface layer which is removed from the original film base and is transferred with the relief side up onto a smooth white sheet for support.

This black-dyed gelatin image then is hand colored. Extreme highlights and white areas of the original black and white print do not accept color and consequently remain clear. The color which the artist applies is absorbed into the gelatin according to the varying thickness of the relief image. He removes excess color by blotting, until he gets the desired

shade. The black remaining in the print plays an important part in establishing tone values.

## **Color Change**

If either the artist or the customer changes his mind about the colors he wants brought out in the subject, the artist simply applies another color over the preceding one to remove it by more blotting. In some other processes removing or correcting colors ruins the emulsion, but in a Flexichrome print correction does not affect the image.

Offset plates made from any type of opaque colored art generally reduce cost about 33 percent over colored transparencies.

Clark Caruthers, whose Todd Studios has been serving the graphic arts trade more than 30 years, says the Flexichrome process is not a replacement for color transparencies, carbo prints or dye transfers. "I



*After artist has squeegeed the gelatin image onto the paper backing as shown in first picture, he carefully removes the protective blanket.*

added the Flexichrome process to my studio four years ago as a stop-gap for problems such as the one involving spinach." It is a supplementary process which he thinks many printers could use effectively to solve similar problems.

#### **Other Examples**

If a manufacturer of ladies' blouses, for instance, has the same design or pattern in a number of colors and wants to show all of them in a catalog and have a different color background for each blouse, the printer might well apply the Flexichrome process as an answer for accuracy in the color of the garments, and at the same time save his customer the cost of a color transparency for each blouse.

With Flexichrome all he would need would be one black and white photograph of the blouse, or one black and white shot of a model wearing the blouse. The retouching normally required can be done more reasonably on a black and white photograph than it can on color. From this retouched photo as many different prints as necessary are made. The artist can more accurately match the exact shade of each blouse when he applies the color to the black-dyed gelatin image, and can erase (blot out) as many times as necessary to

meet the customer's exact requirement as to shade.

The frequent changes of mind common to advertising circles represent another headache which the Flexichrome process meets more amicably than most processes, according to Mr. Caruthers. "Suppose black and white art work is prepared for a national ad. Then somewhere along the line the decision is reversed and the ad is to run in full color. Most

of these decisions usually end up with a quick deadline involved.

"With the Flexichrome process the black and white original art work doesn't have to be ditched. It's perfect for obtaining a straight black and white negative and proceeding with the Flexichrome process of coloring the resultant black-dyed gelatin image."

In a specific instance of this sort, Mr. Caruthers handled a problem in which a 24-sheet poster was converted to color from the original black and white art work. A plus feature was the fact the studio could paste other art work of a girl into the product art work and photograph the whole layout. This gave the company extra use of some old art work which was combined with the original art work of the product.

#### **Quick Change**

A change of mind can also come from misunderstanding of plans. Such a case handled in St. Louis was that of a manufacturer who supplied retouched black and white art of a cut-away drawing of a piece of equipment. The color of the cabinet was to be brown. About a half hour before deadline time, the printer learned the cabinet of this mechanical piece was not going to be brown after all,

*(Continued on Page 143)*

*Artist applying the Flexichrome dye color and then blotting the Flexichrome print on the Wagner Electric Co. job. Budweiser print in foreground is another Flexichrome job handled at Todd Studios.*



**L**ITHOGRAPHERS NATIONAL ASSOCIATION will be holding its annual convention much earlier than usual this year when members return to the popular Greenbrier Hotel April 1-3. The well-known site for the 52nd annual convention is in White Sulphur Springs, W. Va.

A number of items are on the tentative program released late in February by LNA. Topics include future of lithographic markets, the industry's profit picture, trends in collective bargaining, corporation stock, tax problems and other subjects. The LNA awards will be on display during the convention.

LNA president Carl N. Reed will welcome members at the opening session April 1.

Vice president John M. Wolff, at the same session, will report on the growth of the lithographic process and discuss the role played by LNA's Annual competition during the seven-year period of the industry's greatest expansion. W. Floyd Maxwell, executive director, will present the results of the "1956 Survey of Lithographic Profits."

A review of industrial relations within the industry will be undertaken on Tuesday morning by LNA labor relations director Quentin O. Young. A panel discussion will follow, with three speakers handling various aspects of improving the collective bargaining position of the lithographic industry.

The speakers will include Theophil C. Kammholz of Vedder, Price, Kaufman & Kammholz, Chicago, former general counsel of the National Labor Relations Board, reviewing the legal aspects of litho contracts; Christopher W. Hoey of Davies, Hardy & Schenck, New York City, who will discuss group and association bargaining; and Joseph F. Finnegan, director of the Federal Mediation & Conciliation Services in Washington, who will deal with collective bargaining from a mediator's viewpoint. There will be a question-answer period.

The question of stock evaluation by closely held corporations and its tax implications will be discussed by two prominent speakers on Wednes-

day morning. They are Archibald A. Patterson of the law firm, Steinberg & Patterson, New York, and William M. Horne, Jr., of Warner, Stackpole, Stetson and Bradlee, Boston, who is a former member of the staff of the congressional joint committee on preparation of the 1954 Internal Revenue Code.

They will cover the legal and accounting aspects of stock evaluation from the viewpoint of lithographic plants and will relate the matter of federal and state income taxes to the sale of stock interest and the complications involving estate taxes in the event of death — providing for these developments in advance and for the profitable continuance of the business. There will be ample opportunity for questions either submitted in advance or from the convention floor.

A highlight of the convention will be the two afternoons devoted to section and product group meetings which will be conducted under the supervision of LNA Committees. Those lithographers interested in developing greater sales of books, labels and greeting cards will have an opportunity to participate in the meetings devoted to these product specializations.

Sectional sessions will be held by the Bank Stationers' Section, under the chairmanship of George M. McSweeney, president, DeLuxe Check Printers; the Lithographic Platemakers Division, headed by Dante V. Mazzocco, Eureka Photo Offset Engraving, Inc.; and the LNA Poster Committee, headed by Andrew Donaldson, Jr., the Strobbridge Lithographing Co.

John F. Perrin, The United States Printing and Lithographing Co., in his capacity as president of the Lithographic Technical Foundation, will speak on the progress being made in lithographic research and technical development. A concluding speaker on Wednesday morning, to be announced, will survey the future markets for lithography and the role to be played by the industry's plants.

The convention program will include a full program of entertainment in addition to the annual dinner.★

# **LNA**

## **Announces**

### **Tentative**

### **Program**

### **for**

### **April 1-3**



*Left*—water color brush with round, pointed tip of red sable hair. Sizes range from 000 to 14 for this type of brush.

*Center*—single stroke square edge red sable brush with a crimped ferrule. Size range is from  $\frac{1}{8}$  to  $1\frac{1}{2}$ " for this type.

*Right*—show card rigger brush of red sable. It is a square edge brush with a round ferrule, in sizes from 1 to 20.

## Photographic Film **OPAQUING**

By Asbjorn Brekke  
M. Grumbacher, Inc., New York

**A**LL opaques fall into two categories: those which are visibly opaque and stop light by hiding action alone; and those which are visibly transparent yet stop or delay the penetration of actinic light.

Although many kinds of both categories of opaques are available, some for use on photographic films and others for use on transparent overlay materials such as acetate, vinyl, etc., this article will be limited to those water-soluble opaques which fall into the first category, i.e., visibly opaque to stop light by hiding action alone; and of those, only the ones for use on photographic films.

Because of the many variable factors in photographic film processing, such as reflective character of the surface being photographed, dust motes, etc., very few films are suitable for direct contact printing without correction. Because the line or halftone image on process film consists only of solidly opaque or absolutely transparent areas, correction is limited to the controlled addition of an opaque material in the transparent areas or to the removal of unwanted opaque areas in the emulsion.

We are concerned here only with the correction or alteration of photo-

graphic film negatives or positives through the use of fluid opaques, and accordingly will discuss the kinds available, their physical characteristics, working properties and limitations and methods of application.

### *Ideal Opaque*

What exactly are the requirements for an ideal photographic film opaque?

1. First, of course, the ideal opaque should resist the penetration of light from the most powerful arc lamps.
2. It should accomplish this after only a single application.
3. It should lie flat and smooth on either the base or emulsion side for perfect contact printing.
4. It should be water soluble and fluid enough to flow from the most delicate instruments for detail opaquing, yet work just as readily for spotting or large area opaquing without crawling.
5. It should dry rapidly, but not so fast as to interfere with its natural flow from the brush or pen.
6. It should be unaffected by atmospheric humidity or heat, yet should be easily removable for correction without leaving any residue or stain.

7. It should not chip, crack or pop off the film even after strenuous handling.

8. It should scribe cleanly and it should also adhere to glass.

Photographic film opaque can be divided into two general types; the red (pigment base) opaque and the black (graphite base) opaque. Both are visibly opaque and stop light by their covering power alone. However, there are definite differences in their physical characteristics and working properties.

### *Red Opaque*

Red opaque is formulated with a very heavy, densely opaque pigment. The weight of the pigment is such that after comparatively short periods of time it has a tendency to fall out of suspension and settle to the bottom of its container. For this reason, a rather heavy medium is employed as the vehicle. The viscosity of this vehicle tends to delay the "fall out" and at the same time prevents the solidification of the pigment at the bottom of the container, an action which would certainly occur if the solution were more fluid.

These physical characteristics are, I believe, the major reason for many



of the faults attributed to this type of opaque. Unfamiliar with its working properties, many opaquer reason that it depends upon its viscosity for opacity. Or, unacquainted with its physical characteristics, they fail to stir it into proper suspension and instead use only the more fluid material at the surface of the container. Actually, however, this opaque, when properly manufactured and used correctly, should meet all of the requirements listed for the ideal opaque.

There are only two preparatory requirements necessary to accomplish this. First, the opaque should be stirred thoroughly into a uniform consistency, and second, it should be diluted with a sufficient amount of water to make it flow freely from the brush or pen during application.

Stirring should be done with a flat surface, such as a tongue depressor, rather than the usual brush handle which simply cuts through the material. Care should be taken to bring the pigment settled at the bottom of the container to the surface during the stirring operation.

When satisfied that the opaque is in its proper suspension throughout, the opaquers can use it in any one of three ways:

He can use it directly from the jar, diluting it with water on a separate surface, such as a shallow container or slant, before application.

He can dilute a quantity with ap-

*Author Brekke, an artist-representative of M. Grumbacher, Inc., has demonstrated the use of opaques to many lithographers. During the course of these demonstrations he has found that "there is a rather general unfamiliarity with, or lack of information about, the variety of opaques available. Hence, in many instances, products are not being used for their intended purpose or are being used incorrectly."*

*In this excellent outline of opaques and their method of application, Mr. Brekke gives some worthwhile tips on the efficient use of these materials. Samples of the opaques described in this article are available from Mr. Brekke at 460 West 34th St., (18th Floor) New York 1, N. Y.*

proximately again as much water in a container for direct use, keeping this more fluid material in proper suspension by an occasional stirring.

Or, he can pour some out into a shallow dish and allow it to harden for use in cake form. This opaque, by the way, is also manufactured in the convenient dry cake form.

#### **Black Opaque**

Black opaque is physically very different in nature from the red. It

is composed of a graphite base and produced in paste form. Its nature is such that it must be kept moist at all times, for once it becomes dry in the container it is no longer soluble in water and therefore unusable.

Graphite opaque is radically different from red opaque also in its working properties. Although it requires dilution with water for proper application, it cannot be thinned to a consistency that will permit its use as a fine line or dot retouching medium without losing some opacity. Its limited use for spotting and large area opaquing is offset, however, by its one distinct advantage for certain mechanical requirements. It lies so flat and smooth, when properly applied, that it is impossible to feel it on the surface of the film. This feature makes it an ideal opaque for use on 'glass flats,' where any pile-up or ridging might result in cracking the glass under the pressures exerted in the vacuum printing frame.

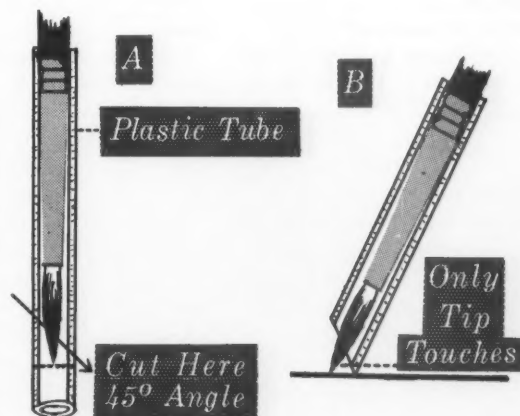
Having covered the physical characteristics, working properties and limitations of the opaquing materials available for photographic negatives and positives, we must now consider the methods of application.

#### **Methods of Application**

The best tool for applying opaque is the fine quality red sable brush. Brushes flow color on to the surface (Continued on Page 143)

## **Plastic Tube Controls Tip**

Control of a small, pointed brush for the most exacting detail work can be greatly facilitated through use of a 'gimmick' which can easily be fabricated from a section of transparent or translucent plastic tubing, according to Mr. Brekke. Insert a brush with a good working point into the tubing so that it is supported firmly by the taper of the metal ferrule or by the belly of the handle. Mark the tubing at the extreme tip of the hair as seen through the plastic and then, after removing the brush, cut the tubing at approximately a 45° angle (A). The plastic sleeve acts as a "bridge," permitting only the very tip of the brush to touch the surface of the negative (B) so that any right-handed person, after only a minute or two of experimentation, should be able to write, letter, draw or rule the finest possible lines with a minimum of effort. The brush should be loaded and "pointed-up" prior to its insertion into the plastic sleeve.





**I**NCREASED interest in color in the graphic arts is reflected in the program for the 36th annual convention of the Southern Graphic Arts Association, April 4-6.

At least three talks at the convention will focus on problems related to color when the group meets in the Battle House, Mobile, Ala. Also scheduled to run concurrently with the convention will be the 18th annual Exhibit of Southern Printing.

The talks directly involving color will be those by O. C. Holland, Wade E. Griswold and G. R. Brunhause.

#### **Talks on Color**

Mr. Holland, director of advertising, Interchemical Corp., Printing Ink Division, will give his well-known presentation "The Magic of Color," in which he uses color patches to show how easily the eye can be fooled.

Mr. Griswold, executive director of the Lithographic Technical Foundation, will give an illustrated talk on preparation of color photo originals. The third speaker, Mr. Brunhause,

who is with Time-Life Corp., will consider the Time-Life color scanner and its operation in the graphic arts.

Preliminary activities, including advance registration and committee meetings, will occupy Wednesday, April 3. On the following day Reuel D. Harmon, president of Webb Publishing Co., St. Paul, Minn., and president of Printing Industry of America, will give the keynote address.

Labor problems will be aired by John H. Doesburg Jr., general counsel of the master printers section of PIA, and Harold S. Hutchinson, executive vice president of the Mack Printing Co., Easton, Pa.

Ralph Colgrove, of Champion Paper & Fibre Co., will discuss the role of paper in printing to conclude the first day of the meeting. Other talks scheduled for the convention include a resume of research progress by Michael H. Bruno, manager of the research laboratory at LTF; a discussion of minimum makeready through precision form preparation,

by O. F. Duensing, sales manager of Vandercook & Sons; a lecture on the Mergenthaler Linofilm, by Ralph Roth, of the company's executive sales staff; and an address entitled "Selling Printing," by Karl Smith, sales promotion manager of Dillard Paper Co., Greensboro, N. C.

#### **Luncheon Speaker**

Henry Hoke, editor of *The Reporter of Direct Mail Advertising*, will be the luncheon speaker on the closing day of the convention. The banquet is scheduled for 7, Saturday evening.

J. Tom Morgan Jr., Litho-Krome Co., Columbus, Ga., is president of SGAA, and Charles E. Kennedy, of Nashville, is secretary-treasurer. Serving on the convention committee, in addition to these men, are Robert S. Gill, Mobile, general chairman; Frank H. Parke, Little Rock; John C. Henley III, Birmingham; S. Toof Brown, Memphis; Harold W. Braun, Louisville; and R. G. Graham, Nashville.

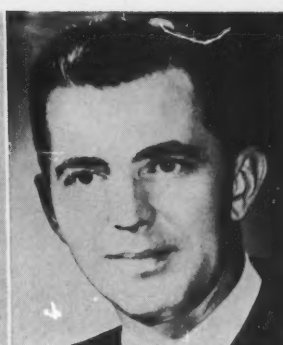
Most of the SGAA members operate lithographic equipment. ★



Henry Hoke



Ralph S. Roth



Ralph H. Colgrove



J. Tom Morgan, Jr.

P  
R  
O  
G  
R  
A  
M

**Wednesday, April 3**

10 a.m. **ADVANCED REGISTRATION:** The registration desk will be open from 10:00 a.m. to 12 noon and from 6-9 p.m. to take care of early arrivals and to answer inquiries concerning the convention.  
**18TH ANNUAL EXHIBIT OF SOUTHERN PRINTING.**

**Thursday, April 4**

8:30 a.m. **REGISTRATION.**  
9:30 a.m. **OPENING SESSION:** Call To Order, J. Tom Morgan, Jr., President, Southern Graphic Arts Association.  
**INTRODUCTION OF KEYNOTE**  
**SPEAKER:** *Harold N. Cornay*, president, Press of H. N. Cornay, New Orleans, La.  
**KEYNOTE ADDRESS:** "The Hidden Treasure of the Graphic Arts," Reuel Harmon, president, PIA.  
"THE STORY OF THE TIME-LIFE-SCANNER," *G. R. Brunhouse*, Printing Developments Inc., New York, N. Y.  
2 p.m. "THE MAGIC OF COLOR," *O. C. Holland*, Director of Advertising, Interchemical Corporation, Printing Ink Division, New York, N. Y.  
"LABOR PROBLEMS," *John H. Doesburg, Jr.*, general counsel, M. P. S., Printing Industry of America and *Harold S. Hutchison*, executive vice president, The Mack Printing Company, Easton, Pa.  
"PAPER'S ROLE IN GRAPHIC ARTS," *Ralph H. Colgrove*, advertising and sales promotion, The Champion Paper and Fibre Co., Hamilton, Ohio.

**Friday, April 5**

8:30 a.m. **REGISTRATION**  
9:30 a.m. **OPENING SESSION**  
**INTRODUCTION OF SPEAKERS:**  
*J. Tom Morgan, Jr.*, President, SGAA.  
"GETTING GOOD QUALITY CONSISTENTLY," *Michael H. Bruno*, managers, research laboratory, LTF.  
"PREPARATION OF COLOR PHOTO ORIGINALS," *Wade E. Griswold*, executive director, LTF.  
"MINIMUM MAKEREADY THROUGH PRECISION FORM PREPARATION," *O. F. Duensing*, sales manager, Vandercook & Sons, Chicago, Ill.  
12 Noon "AWARDS LUNCHEON"  
2 p.m. Sightseeing Trip: Bellingrath Gardens

**Saturday, April 6**

8:30 a.m. **REGISTRATION:** The registration desk will remain open until 2 p.m.  
9:30 a.m. **OPENING SESSION**  
"THE LINOFORM," *Ralph S. Roth*, Mergenthaler Linotype Company, Brooklyn, N. Y.  
"SELLING PRINTING," *Karl Smith*, sales promotion manager, Dillard Paper Company, Greensboro, North Carolina.  
12:30 p.m. **LUNCHEON:** Speaker, *Henry Hoke*, Clearwater, Florida.  
2 p.m. **ANNUAL MEETING, SGAA.**  
5:30 to 7:00 p.m. **SUPPLIERS HOSPITALITY HOUR.**  
7 p.m. **ANNUAL BANQUET.**

Reuel D. Harmon



G. Robert Brunhouse



Harold S. Hutchison



John H. Doesburg, Jr.



# SPECKS

## in Prints

**S**PECKS in prints result from a variety of causes, and in order to eliminate or minimize specks, it is necessary to trace their causes.

It is doubtful that all potential causes of specks can be described, because unusual circumstances can develop on occasion. However, the ordinary causes of specks in prints are classifiable thus:

1. Pits in paper or plates.
2. Lumps on paper or plates.
3. Pick.
4. Loose surface dirt.
5. Spray.

### **Pits**

Pits in paper or plates are relatively infrequent causes of specks in prints, but when pits appear, they are troublesome. Fortunately, it is easy to determine whether the pits are in the paper or the plates.

**Pits in Paper**—Pits are tiny wells or indentions in the surface of coated paper, ranging in size a little more or less than the head of a pin. A printing plate or an offset blanket cannot get ink down into the indented spots and so they appear as white specks in printed areas.

If pits appear in paper with a frequency sufficient to harm a printing run, there is no practical corrective except replacement of the paper. However, first the presence of pits in the paper should be verified because (a) the specks may be due to loose surface dust rather than pits, and (b)

specks in lithographed images may be due to pits in the plate.

**Pits in Lithographic Plates**—Pits may appear in a lithographic plate in consequence of imbedded graining abrasive or oxidation. Rollers cannot get ink down into them and so they produce white specks in printed areas. There is no practical corrective except to make a new plate.

**Distinction**—It is easy to localize the source of pits. If pits are in paper, the white specks will appear in identical patterns on successive sheets.

### **Lumps**

A lump that rides on the surface of a sheet of paper may cause an indentation in a plate or blanket and create a white hole in successive prints and require a stop for repairs.

The first task should be to fan the pile of printed sheets to recover the one that carried the lump and remove it so that it cannot duplicate the damage on the backup. If the remains of the lump can be recovered, they may disclose its source. If the nature of the lump cannot be determined, a wise procedure is to fold its remains in the sheet that carried it and submit it to the paper mill.

A damaging lump could be a lump of coating attached to the surface of a sheet, or a splinter of wool loosened in opening a case, or a piece of tape loosened in opening a carton or from other less likely sources. Unusual examples of record range from half of the handle of a make-ready knife to the time card of a mill inspector.

### **Picking**

There are two kinds of picking. One kind is the lifting of coating away from the fibrous body. The

other kind involves pulling tiny particles from the surface of the paper.

**Lifting**—If the tack of an ink is greater than the cohesive strength of paper, the strain when the inked plate or blanket leaves the paper will cause a blistering or a lifting.

Blistering is evidence of internal rupture. Lifting is a complete pulling apart which leaves fibers exposed and leaves a fragment of the paper affixed to the printing plate or blanket.

**Letterpress**—If the lifting were confined to a single sheet, the only direct effect would be a white area in the print on that sheet alone. The white area would not repeat on successive sheets. However, when ink tack and paper cohesion are not in balance, the lifting could be expected to occur on more than one sheet.

After a lift has occurred, some of the particles that have pulled out may settle on a letterpress plate and thereafter print as black specks surrounded by white halos.

**Lithography**—After a lift on an offset press, the lifted segment will stick to the blanket and will continue to repeat the original white spot until removed.

When lifting occurs, the available correctives are to wash up to get paper fragments off the blanket, and to reduce ink tack.

Lifting is an infrequent source of trouble in the normal uses of the letterpress and lithographic processes for printing halftones, process color and solid colors. Lifting becomes a potential hazard when paper is not properly selected for the process or when it is abnormally taxed.

The very best qualities of paper for

From "Specks In Prints," How It Will Print, Bulletin No. 2, issued by S. D. Warren Co., 89 Broad St., Boston 1, Mass., for the purpose of aiding pressmen to deal with the complexities of the printing and lithographic processes.



the printing of pictures by letterpress are not designed to withstand the pull of an offset blanket.

The printing of solid colors of gloss inks entails a hazard because the tack of gloss inks can intensify in the course of a run as oxidation occurs on the ink plate and rollers. The risk can be minimized by selecting litho-coated papers for gloss inks rather than paper designed for letterpress.

The best safeguard against lifting is to select a paper that is designed for the planned use and to submit sheets to an inkmaker so that he can supply a harmonious ink.

**Pickouts**—The effect of pickouts is quite different from the effect of lifting.

Pickouts are caused by isolated particles of clay or other substances which are contained in the surface of paper but which are not firmly bound in the paper.

The white specks resulting from pickouts will appear at random. They may or may not expose fiber. They do not resemble the effect resulting from lifting, but they are similar to (and could be confused with) specks resulting from pits or loose surface dirt.

There is no practical corrective for pickouts.

### Loose Surface Dust

Loose surface dust is one of the two major causes of specks in paper. When dust particles rest on the printed surface of paper, they prevent ink from reaching the paper and are promptly pulled off by the plate or blanket, leaving white specks where they were.

**Letterpress**—In letterpress printing, surface dust is dispersed promptly into the inking system, and the specked appearance on the sheet that bore the dust will not repeat but will peter out. The third or fourth sheet following may be expected to show no trace (assuming that no new dust appears).

However, a secondary effect may follow. If some of the dust particles should settle on the surface of the printing plate, they will print as black specks surrounded by white halos.

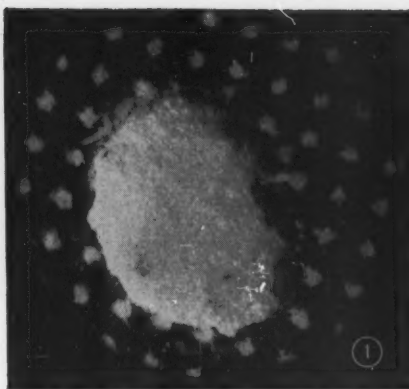


Diagram 1 is a greatly enlarged photograph of an area that had been picked by an offset blanket. Here the fiber exposed by the lifting of the surface has the same appearance as a letterpress pick. Diagram 2 is a greatly enlarged picture of a speck that was covered by a loose particle of cutter dust. The particle was pulled away by the blanket, leaving a speck. Note that the paper surface is unbroken.

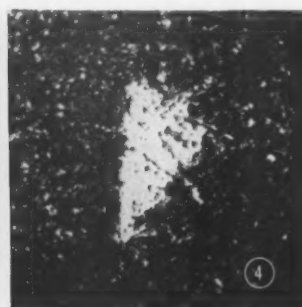
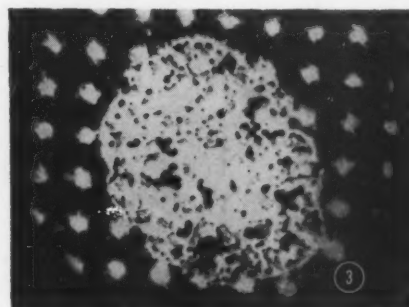


Diagram 3 is a photograph of the same area as (1) on the 500th sheet following the pick. No fibers show, but the white speck has repeated on sheet after sheet, with slight distortion, because a surface lifted by an offset blanket attaches to the blanket and remains. The coating and fiber particles absorb water and resist ink and therefore cause white specks on succeeding sheets. Diagram 4 pictures the identical area as (2) on the 500th sheet following. The speck has repeated on all sheets because the dislodged particle clung to the blanket and absorbed water and resisted ink. Specks in offset prints invariably are white if caused by paper dust. Paper dust does not cause black specks in offset prints.

And if some of the dust particles should become embedded in the screen of a halftone, they will function as additional screen dots and will print as black specks without halos.

**Lithography**—The effect of loose surface dirt on lithographic reproduction is quite different from the effect on letterpress prints.

If a sheet of paper going through an offset press carries surface dust, the dust particles will take ink and pull off onto the blanket, leaving white specks where they were. Thus the effect on the dust-bearing sheet will be a duplication of the effect produced by letterpress. But the effect on following sheets will be quite different.

If the dust particles are paper fibers or coating pigments, they can be expected to remain attached to the blanket and to absorb water and resist ink. Consequently, they will repeat the pattern of white specks on following sheets. The specks will remain white because the dust particles will continue to absorb water and repel ink.

Black specks on lithographic images come from other sources such as ink or particles of crumbling rollers. Particles of such nature are carried in the ink to the offset plate, where they adhere and remain. They repel water and accept ink and print as black specks. Their thickness serves to bear the blanket off the plate and so the black specks that



Diagram 5 is a greatly enlarged picture of a white speck in a print caused by a pit in an offset plate. The pit resulted from oxidation. Diagram 6 is a greatly enlarged photo of specks caused by the molleton fibers released by a dampener roller on an offset press. Their general shape distinguishes them from all

other classes of specks. Diagram 7 is an enlarged photo of black specks or "hickeys" in an offset print. They have the appearance of letterpress hickeys but they cannot be a result of dust originating in paper. Paper dust clings to a blanket, absorbs water, resists ink and causes a white speck.

they create are surrounded by white halos.

One cause of specks in prints, which is peculiar to lithography, is traceable to cotton fibers shed by dampener rolls. The loosened fibers disperse through the inking system and arrive on the plate. They soak up water and repel ink and therefore create wormlike white specks in prints.

Dampener fibers can be distinguished from paper fibers because they are very much longer and wider.

Paper manufacturers have invested substantial sums of money for devices and methods to keep dust and dirt out of paper and off the surface of paper, and the methods have been effective. But there is no known absolute method for eliminating dust and dirt in paper mills or in printing and lithographing plants.

The necessary trimming of paper dislodges some of the fibers and pigments contained in it. Dust in air will settle on exposed sheets of paper in mills and in pressrooms. Dust and fiber particles can accumulate in press brushes and drop onto sheets that were spotless when they entered the press. Spray-fogged pressrooms are major sources of dirt. The sources of dust and dirt are numerous.

The best precautionary measures are: (1) to maintain a general cleanliness; (2) to keep cutting knives sharp; (3) to clean cutter beds before jogging; (4) to clean brushes frequently.

#### Spray

In recent years a major cause of specks in prints has been spray. The

spray devices themselves are not at fault. The fault comes from improper use.

The substance that is sprayed on prints serves primarily to hold printed sheets apart in the delivery pile so that they may not snuggle up tightly and transfer ink. Necessarily, the sprayed substance is resistant to ink; it constitutes a barrier between a printed surface and the surface that quickly comes to rest upon it.

Spray particles can mar prints the first time the paper is fed through a press. Spray can produce scars or scratches on the first color down. Spray can interfere with the backup of a sheet. Spray can obstruct the overprinting of colors.

*Pre-Impression Influence*—A natural question is, "How could spray influence the printing of a sheet the first time through the press?" Presumably spray can't get on a sheet of paper until the sheet has been delivered, yet spray gets on.

This phenomenon of spray interference on the first impression may take a puzzling pattern, because it is likely to appear on sheets at irregular intervals. Perhaps sheet number 863 and sheet number 4021 are good except for small areas. In those areas it appears that somebody wiped the print with a gasoline-soaked rag—and the missing ink is offset on the back of the following sheet.

The faulty prints do not conform to a pattern, and they do not appear in a mathematical sequence, and so they do not make sense. But a microscopic examination makes the sense. The faulty areas are covered with

translucent globules of spray, which prevented the ink from attaching itself to the surface of the paper.

How could the spray globules get onto the sheet of paper before it arrived at the delivery? There are many answers to that question.

One answer is that when spray is used profusely, it fogs up a pressroom and the excess particles settle on machine parts and overhead structures. Then at irregular, unscheduled intervals small particles or slugs fall off and onto an unprinted sheet and prevent its proper acceptance of ink.

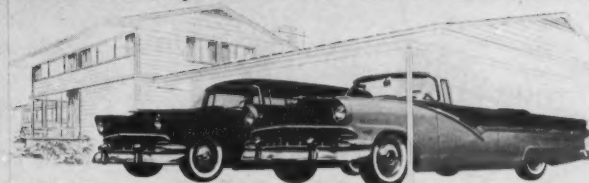
Other answers are arrived at less readily. A company experienced the trouble in its lithographic department, where no sprays were in use. Yet a microscope disclosed the presence of spray globules. After a period of doubt and investigation it was discovered that spray from another department was being sucked into the intake of the air-conditioning system and pumped through the system into the lithographic department.

*First Impression Influence*—An overgenerous dose of spray can produce scars or scratches in the first color printed. The scars or scratches will show directional movement. A microscope will disclose a collection of spray globules tinted with ink. The effect results from the fact that the volume of spray globules on the inked surface was excessive and that jogging on delivery caused the spray globules to scratch in the jogged direction.

*Influence on the Backup*—The pattern of spray fault on the backup is (Continued on Page 143)

First

4 bedrooms, 3 baths... **2 FORDS**



*Gugler Litho Co.*, produced this Ford Motor Co. outdoor poster which won the First Grand Award at the 25th National Competition of Outdoor Advertising Art, sponsored by the Art Directors Club of Chicago. J. Walter Thompson Co. was the agency, George Booth the art director, and Irv. Olson and Frank Russell the artists.

Second



*Thomson-Symon Co.*, lithographed this Procter & Gamble poster for Blue Cheer which won the Second Grand Award. Young & Rubicam, Inc., was the agency, Arthur Seller, the art director and Raymond Savignac, the artist. This is the second time that the noted French poster artist's work has taken a major award in the American competition. He won a First Grand Award with his Life poster two year ago.

Third



*Western Printing & Litho. Co.* lithographed this Theodore Hamm Brewing Company outdoor poster which won the Third Grand Award. Campbell-Mithun, Inc., was the agency, Len Avery, the art director and Carl Paulson, the artist.

## Gugler Lithographs Winning Poster

**T**HREE well-known lithographers shared top honors in production of the three grand award winning posters in the 25th National Competition of Outdoor Advertising Art, sponsored by the Art Directors Club of Chicago. The contest was held in Chicago, Jan. 22 and 23.

A Ford Motor Company poster again won first grand award. In second and third places were posters for Procter & Gamble (Blue Cheer) and Theodore Hamm Brewing Co.

The winning lithographers were Gugler Litho Co., Thomson Symon Co. and Western Printing & Litho Co.

This is the second time that Raymond Savignac, the noted French poster artist, has taken a major award in the American competition.

The Ford Motor Company design was produced by J. Walter Thompson Co., the Procter & Gamble poster for Blue Cheer was produced by Young & Rubicam, Inc., and the Theodore Hamm Brewing Co. poster was produced by Campbell-Mithun, Inc.

In addition to the three top awards, the jury selected first, second, and third winners in 17 classifications, including public service advertising, and painted displays. These selections, with an additional number of designs, will be published in the *Poster Annual* in April by Outdoor Advertising Incorporated.

John Willmarth, executive vice president and art director, of Earle Ludgin & Co., Chicago, was chairman of the competition and exhibit committee. Basis for judging the designs was (1) The value of the idea to create sales or promote a cause; and (2) Effectiveness, excellence and ingenuity of design, composition and technique.

To facilitate judging, the designs passed before the jury on a conveyor belt in a darkened room, so that only one design was visible at a time. To cast a vote for a design, the juror merely pressed a button on the right-hand arm of his chair. After a 10-second exposure, a control switch was opened, and all votes for the design were registered on a lighted panel. The number of lights indicated the number of votes cast for that design.★



# Keys to better Profits

**W**HY do some printers and lithographers make a substantial profit of up to 12 percent while others scrape along year after year realizing only about three percent? That is a question that has perplexed the industry for many years.

Recently Lithographers National Association made a survey of the profit picture in lithography to determine who is making adequate profits and why.

Printing Industry of America also has concerned itself with this theme. For 33 years its Ratio Studies have sought this information from hundreds of printers and lithographers in the United States.

At the 70th annual convention of PIA in Los Angeles last November, Peter Becker Jr., of Arrow Service, Washington, D. C., took a critical look at the most recent PIA Ratios and came up with some interesting interpretations that shed a good deal of light on the subject.

To start with, Mr. Becker asserted, the Ratios show that the following factors *do not* determine good profits:

1. Location of the business.
2. Size of the community.
3. Size of the plant.
4. Sales volume.
5. Process.
6. Product.

He found that when all these variables were considered individually, they did not indicate that, for instance, East Coast shops are more profitable, or that it is most profit-

able to operate in cities of 100,000 to 200,000 thousand population. All these factors, according to Mr. Becker's analysis, were not significant.

Then how do you explain the fact that 151 of the plants reporting to the PIA Ratio survey make more than half the total profit of the entire group polled?

The answer, according to Mr. Becker, must be found in differences in plant management.

Considering that subject from five viewpoints: selling, plant planning, people, production and money, Mr. Becker had these comments:

## **1. Selling**

Amount of *sales increase* was found to have a bearing on profits. According to his analysis, the high-profit plants (who earned 12.82 percent on their investment) had an increase in sales of 14.7 percent, while the low-profit plants (with average earnings of 3.90 percent) registered sales increases of only 7.5 percent.

Furthermore, for each \$100 of sales, the HP (high-profit) group paid \$6.13, while the LP (low-profit) group paid \$8.01.

Another factor affecting profit is the method of remuneration for salesmen. Mr. Becker noted that 61 percent of the HP group had their men on salary, while only 48 percent of the LP group used this means of payment.

Non-competitive work apparently



isn't a reason for profits, he further found, because just about half of the work in both groups was competitive.

Thus the belief that the high profits are made on higher markups for non-competitive accounts just doesn't hold water. Mr. Becker stated.

Keeping busy seems to be a characteristic of the HP group. The HP percentage of overtime was nine percent, while the LP percentage was only six.

## 2. Plant Planning

Age of equipment varied very little from HP to LP groups. Equipment averaged 5.7 years for the HP group, seven years for the LP group. The question of one, two or three shifts appears to have little effect on profits, he added.

Another significant factor was use of production control boards: 58 percent of the HP group had them while only 47 percent of the LP group used them.

## 3. People

It is in this category, according to Mr. Becker, that a pattern which accounts for higher profits begins to emerge. The HP group had sales of \$15,300 for each mechanical employee; the LP group had \$14,100. "Now I don't know what your own figure is," Mr. Becker said, "but if you will relate that to your own situation, I think you might begin to see the reason for this profit variance."

## 4. Production

One of the factors which affects costs is the cost of selling and handling an order—in other words, the office or administrative expense as well as the sales expense. Sales per mechanical employee tells the story as far as men in the plant are concerned; sales per sales-and-office employee gives the picture as far as that branch of the shop is concerned.

The HP group handled \$72,300 worth of sales per employee. The LP group handled only \$58,900.

"Let me give you a picture of what these two things mean in regard to the average plant. The average in this group has sales of about \$700,000. Applying these figures, the LP group would have 50 men in the plant, 12 in the office; the HP members would operate with 46 in the plant and 10 in sales and office. That is one of the answers to the profit differential," Mr. Becker explained.

Some other pertinent facts are these: 41 percent of the HP group has incentive and profit-sharing plans; only 31 percent in the LP group.

Laughter greeted Mr. Becker's finding that only 44 percent of the high-profit group had foremen's meetings, while 53 percent of the low-profit group had them.

"Obviously, the way to do better is to have fewer foremen's meetings."

As for suggestion systems, the percentage in each group having them varies only slightly. 32 percent of the HP group said their systems worked, while only 63 percent of the LP group could make that boast.

Another revealing way of comparing operations of high and low profit groups is to analyze where the printer's dollar goes.

By so doing, Mr. Becker found that the major difference is \$3.67 less for factory costs in the HP group, with lesser differences for materials and sales.

## 5. Money

Mr. Becker related an interesting theory of money.

"There has always been a theory that the smart operator is the 'O.P.M.' man. In other words, he uses 'Other People's Money!' His reason is simple: if you haven't a \$100,000 deal, and you have \$20,000 and borrow \$80,000, you make \$20,000 on the deal, or 100 percent on your own investment of \$20,000. If you put up the full \$100,000 yourself, you come up with a profit of \$20,000 or 20 percent.

"That's a good theory, but those of us who lived through 1929 to 1938 are a little skeptical, because if it goes the other way—if there is a

loss—you don't lose 20 percent, you lose 100 percent. As a matter of fact, if you have an equity of \$20,000, you don't have to lose \$20,000 to be wiped out. They will probably cut you off at about \$10,000 or \$15,000."

The Ratio figures showed that for every \$100 of assets, the HP group had \$15.90 in cash; the LP group had only \$9.58 in cash," Mr. Becker stated.

A study of payables showed that the HP group owed \$9.18 for every \$100 of assets, while the LP group owed \$14.68. Hence, fixed debt was \$4.86 against \$11.08. The high-profit plants had a much higher investment per dollar of sales, because they had more money in the business and they had less debt. They also had more working capital, the survey showed.

"If you stop to think about it, it isn't location, size of plant, or sales volume, which explains the profit picture. It isn't any of the normal alibis that I could myself have imagined. It's *people* who sell better than other people. It's people who plan the basic setup, and choose the type of equipment, better than other people.

"It's people who produce better. Obviously, the difference in production alone is people. That was the major factor, you will remember, in the difference between the low-profit and the high-profit group. And, finally, it's people who actually put jobs through the plant.

I think printing managers have to use what we call "selective" management in terms of finding the weakest spot and improving it.

What kind of a plant have you got? Can you go away for two or three weeks or a couple of months or two or three years without worrying? Would the place run as smoothly or perhaps better without you? Or would it fall to pieces? What kind of people have you got—not just the ones who are running the place, doing the selling, the producing and managing the money—but the ones who can step into shoes that may have to be filled—sometime, on short notice?

Those who select, train and develop personnel are the ones who will make the difference between 12.8 percent and 3.9 percent.★

# Keeping Pace with

By Robert E. Rossell

Managing Director, Research & Engineering Council of the Graphic Arts Industry, Inc.

THE graphic arts ranks as one of the top 10 giants of American industry. But despite its great modern presses and mechanical speeds, this giant has been rather lazy about trying to improve his old methods of putting ink on paper.

Compared with other industries very little coordinated research effort has been expended to improve our methods and products. However, thanks to years of research by interested groups, there are certain developments that point to a resounding advance in providing better quality for less cost. In order to keep up with what is going on in our industry, let us take a look at some of these developments.

My remarks will be concerned only with those new developments which actually exist today but are being used only to a limited extent. I will not try to indicate cost factors because only time will tell what the costs will be. What I hope to do is to be clear enough to convince you lithographers that it would be wise for you to make personal investigations of the developments I am going to discuss. You are the only ones who can determine whether a certain new method or piece of equipment would be a good thing for your business.

## **'Current Obsolescence'**

First, however, I want to caution you not to become lulled into believing that your present equipment and methods are doing a suitable job no matter how old they are. All equipment, materials and methods tend to

become obsolete in a relatively short period of time simply because of the improvements incorporated in new ones. This is called "current obsolescence," and it is an important thing for you to watch. If you don't watch it, you are likely to find that you can't keep up with your competitor. As time goes on the pace of change will speed up and then it will become more important—and more difficult—for you to keep up.

If your presses or machines have been in use more than 10 years, it is quite likely that they are outmoded and should be replaced with up-to-date items. But I would like to qualify that statement by making an exception of certain machines that are performing specialized operations at a profit even though they are very old. Some old machines have been rebuilt several times, and are quite adequate for the specialized operation they perform. This type machine may be considered "obsolete" in age, but it is not obsolete in terms of the job it is doing.

Other machines are a different story.

Printing presses and other expensive tools in our industry are built so well that they last and last. It is easy to postpone buying a new piece of equipment because the old one will keep on running. It usually can go another month, another year, or just about as long as you want it to.

How do you know when a machine is obsolescent? One formula designed to answer this question is based on the theory that you compute the cost of the new machine by de-

termining the cost of *not* replacing it. In other words, it is the difference between the performance you get from your old machine and the performance you would get from the best alternative to it. This margin can be determined by several factors—the cost of the new machine, salvage value of the old machine, superiority of product, increased output, labor costs, maintenance and repairs, supplies, floor space and insurance.

It is comparatively easy to figure these factors on your present equipment yourself, but many of you probably don't know the cost of new equipment or even the amount of return it will give you. So, it probably would be to your advantage to contact the manufacturers of the new equipment and have their representatives figure out for you how much it is costing you *not* to install a modern machine.

I must emphasize that in discussing most of these developments I am describing them for the purpose of letting you know of their existence. Since some of them are potentially competitive to each other or to existing items, I will not attempt to evaluate qualitatively or quantitatively but merely describe them briefly.

## **Color Reproduction**

First, let us see what is new in color reproduction. As you know, the widespread use of color printing today generally is made possible by large editions so that the cost of camera work, platemaking, color correction and press time can be dis-

# New Developments

*Mr. Rossell's talk was given at the Graphic Arts March of Progress exhibit in Milwaukee, Dec. 13. While much of the material appeared in another form in articles carried in previous issues of Modern Lithography, it is felt that this article and the concluding section to appear next month, give a good overall survey of the new developments in lithography and related fields.*

tributed over a large number of impressions. Where only a thousand or so impressions are required, the initial costs are so great that printing in color usually is out of the question for most customers. But there is a very large potential market for color printing if the costs could be reduced substantially. A process aimed primarily at filling this need has been developed by Eastman Kodak Company.

The process was developed to facilitate the use of color transparencies in color printing because that type of original is so widely available today. Offset lithography was chosen as the printing medium because—at the time—Kodak was also experimenting with an offset plate. However, the fundamental principles of the process may be applied as well to other types of printing. The technique departs from conventional methods of color printing in the following ways:

1. All color correction is achieved photographically by masking. There is no handwork corresponding to the work of color etcher at any stage of the process.

2. Printing is done in three colors instead of the conventional four colors. The inks used differ slightly in hue from conventional process colors.

3. All registration, with the exception of the final small adjustments on the press, is achieved by purely mechanical methods; and all the operations—masking, making of negatives, printing of the negatives onto the plate and final placement of the plate on the press—are designed to achieve registration automatically.

It is interesting to note that a number of printers have set up facilities to produce this type of color printing by lithography. One slogan is: "Pleasing color reproductions at prices everyone can afford." And his price list supports this claim. This is tangible evidence of one of the greatest strides ever made in color printing, and we should be aroused to its great potential.

Also, at least one photoengraver has applied Eastman's fundamental principles to the making of photo-engraved letterpress plates.

Many other new photomechanical developments, such as color correction masking cameras and printers are arriving on the scene. Some are fully commercial, while others are just going through their early growing pains.

## Electronics

Let us turn now to the developments in the field of electronics. Do you fear the coming of electronics into your operations because it sounds so new and strange? You and your employees may feel that this new science will waste the skills and knowledge of your craftsmen and require you to hire new technicians. If that is your feeling, let me say that the operator of electronic printing equipment requires no more knowledge of the theory of electronics than you have to know about the technical theory behind your television set or telephone when you operate them. The necessary controls for electronic equipment naturally will be quite different from those on

your conventional equipment, but their adjustments will be designed to accomplish the same old familiar duties.

Here is a quick but by no means complete list of valuable services in our work already being performed by electronics:

1. Register control in high speed web color printing.
2. Control of cutters.
3. Stopping of machines in the case of misfeeding, and so forth.
4. Counting and sorting.
5. Control of web during printing, trimming, and slitting.
6. Exposure timing.
7. Color and tone measuring and control.
8. Density measurement.
9. Control of temperature and humidity.
10. pH measurement.

All of these electronic aids are helping to produce a better product at a lower cost and you should keep abreast of them.

At the recent convention of the American Photoengravers Association, Judson A. V. Hyatt, vice president of Fairchild Graphic Equipment, Inc., delivered a very informative and comprehensive paper covering the "Accomplishments and Promise of Electronics in Photo-Engraving." He said that 10 companies are betting considerable money and effort that electronic equipment will become an intimate and everyday part of platemaking operations—gravure, letterpress and offset.

These electronic developments are moving forward with the aim of

producing faster and more accurate preparation of color or black and white line and halftone plates. At the present time, this electronic equipment may be divided into two categories. In one, the final plate itself is made directly from original copy by electronic techniques. In the second, electronic principles are being applied to the preparation of photographic materials, which are then used in the normal manner.

One of these electronic devices is the well-known Springdale Color Scanner. It was conceived by the engineers of Eastman Kodak Company and developed cooperatively by that company and Time, Inc. The Scanner automatically and accurately produces continuous-tone, color-corrected negatives from original color transparencies, calculating and integrating the required color and black components.

A number of color reproductions made from transparencies color-separated on the Springdale Scanner have appeared in the Eastman Kodak Company's magazine, *Applied Photography*, and considerable scanned color work is appearing in Time, Inc.'s own publications, particularly *Life*, *Time*, and *Sports Illustrated*.

It is interesting to note that with the Scanner, which accepts color transparencies up to 8 x 10" and produces simultaneously four-color corrected separations in approximately an hour and fifteen minutes, there seems to be no reason why more than one transparency can't be separated in one pass. Thus, two 5 x 7's or four 4 x 5's can be done at once. In the case of 35-mm. negatives, a large number can be done at one time. Enlargement or reduction to reproduction or printing size is accomplished during the subsequent screening operation.

This machine was mentioned first because it is the color equipment now in most advanced commercial operation. Time, Inc., through its subsidiary, Printing Developments, Inc., has set up service organizations in the New York, Chicago and San Francisco areas to accept original transparencies from commercial printers and return to them continuous-

tone, color-corrected negatives.

Another electronic device similar to the Springdale Scanner is the RCA Color Corrector. Mr. Wurzburg, of Interchemical Corporation, and Professor A. C. Hardy, of Massachusetts Institute of Technology, are co-inventors of this device. Radio Corporation of America with R. R. Donnelley and Sons has taken over the additional development of this machine.

The prototype model of this all-electronic scanner is being completed for installation in the Donnelley plant in Chicago for a year's trial. Plans for production of this equipment have not, as yet, been disclosed. This machine accepts a set of uncorrected separation negatives made with standard filters. The corrected separations are produced one at a time in approximately 15 minutes each. This technique of pre-separation has an advantage in some applications since composition of copy can be performed in the pre-separation stage.

All of you probably are familiar, to some extent, with the development of the Springdale Scanner and RCA Color Corrector equipment. But how many of you are acquainted with the NEA-Acme Scanner being produced by NEA-Service, Inc., Acme Teletronics Division? This color scanner is being used for internal commercial production. It accepts color transparencies or opaque originals and produces color-corrected, continuous-tone separation positives or negatives in either three or four colors. All of the separations are made simultaneously. The general operation of the NEA-Acme Scanner is basically similar to the Springdale machine, but a big difference exists in the electronic circuits. This machine is being used for an ROP color subscriber service. Plans for the commercial marketing of this machine outside the NEA-Acme requirements have not been disclosed.

Other organizations and individuals actively working in the electronic approach to color separation are Miehle Printing Press and Manufacturing Co. and Fairchild Graphic Equipment, Inc., in the United States; Crosfield and Hunter-Penrose, in

England; Belin, in France; and Dr. Rudolf Hell in Germany.

The availability of color scanners offers possibilities of substantial savings of both time and money, and their use should serve to accelerate even more the tremendous increase in the use of color. With them, a big step can be taken in the direction of production-line methods.

Three companies are producing automatic photoelectric scanners that directly engrave monochrome plates for molding or for direct printing by letterpress. Many of these scanners are being used, chiefly by short-run newspaper printers, in small towns. Commercial printers should also be interested in keeping pace with this development because it promises economies in production costs and, perhaps, an important reduction in the time cycle of producing engravings.

The three producing companies are Fairchild, Rudolf Hell, and the Elgrama Company, of Switzerland. Several other organizations have tried to build machines for the same purpose, but none has succeeded in breaking into the commercial market.

There are several variations of machines being offered by each of these companies. Fairchild offers the Scan-A-Graver for producing same-size engravings, and the Scan-A-Sizer, which permits enlarging or reducing at the time the engraving is being made. Both machines engrave on plastic.

The Rudolf Hell Co.'s electronic engraver can engrave on plastic as well as on metal. It produces a plate the same size as the copy and is offered in several screen sizes.

Both the Fairchild and the Hell machines engrave a conventional halftone screen. The Elgrama offers a non-standard pattern. It cuts a variable width groove similar to a woodcut and the plates are the same size as the copy. It is versatile, however, in that it offers a selection of 13 different screens, from 50 to 200 lines per inch.

Electronic engravers which produce line cuts also are in commercial use. A special model of the Hell machine and the standard model of the

(Continued on Page 134)





## Recognize this place?

If you're one of the thousands of engravers, lithographers, gravure or screen process men who have come to Kodak's Graphic Reproduction Technical Service Center, you probably do. This is the main studio.

You've seen more than one of the men in the picture at conventions and technical meetings. They get around a lot. It's part of their job.

They are experts whose lives are devoted to the graphic arts. They are instructors in technical methods at the Technical Service Center in Rochester. But they have other duties.

Like your technical representative, these men are pretty good evidence of Kodak's belief in *service*. Service to you.

The fact that people in the graphic arts industry (who already know their business well) come from the West Coast, from Hawaii, even from Australia, to review advanced photo-mechanical techniques with these

Kodak technicians, speaks well for their background.

### Testing, development, research

These men also use their technical knowledge and experience to put Kodak materials through their paces. They devote much time to development and testing of new products and the improvement of existing materials.

Their willingness to help and ability to impart useful knowledge to others are part of what you get when you use Kodak materials.

The photographic excellence you have come to expect of Kodak materials is built on the devotion and skill of such people—technicians and research scientists. The application of photographic techniques and materials to the graphic arts is their *only* business.

**Free bulletin.** Plates, films and chemicals are described in "Kodak Materials for the Graphic Arts." Ask your dealer or write to Rochester for your free copy.

*Text for this advertisement was set photographically.*

Graphic Reproduction  
Sales Division

**EASTMAN KODAK COMPANY**  
Rochester 4, N. Y.

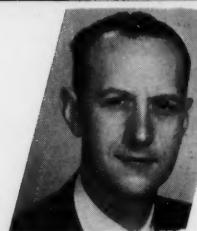


An advanced group visiting Center for two-day session discusses Kodak Magenta Masking Method.

**Kodak**

## PHOTOGRAPHIC CLINIC

By Herbert P. Paschel  
Graphic Arts Consultant



### Can't Duplicate Results

**Q:** We are using a particular brand of plates and films with the same orthochromatic emulsion. With either the same or different exposure and processing technique we are unable to obtain duplicate results. Can you explain this?

J. A. B., MONTREAL

**A:** Although the manufacturers of sensitized materials strive to produce plates and films with matched characteristics, it is extremely difficult to accomplish and is not always achieved. The differences in the base materials, substratum, coating techniques and coating thickness, etc., all contribute to some slight, or great differences in the resulting plates and films, even when the identical emulsion batch is used for both.

Although the two materials are given the same name, or designation, it is not correct to assume that the photographic response is identical in every respect. When the difference is very slight, it is usually possible to compensate in exposure and processing and achieve nearly equal results. With a vast difference in overall characteristics it may be impossible.

### Chemical Reversal

**Q:** Is it possible to chemically reverse a line or halftone film and obtain a positive instead of a negative? If so, can you provide instructions?

T. V. R., CHICAGO

**A:** The answer is yes, with the reservation that all films of that type do not necessarily lend themselves

*Camera troubles? Why not drop a note to Mr. Paschel, c/o Modern Lithography, Box 31, Caldwell, N. J. He'll be glad to draw on his years of experience as a consultant to answer your question.*

to reversal treatment, nor do they produce equally good results. The procedure, however, is relatively simple. The first camera or contact exposure must generally be longer than normal. In the first development the image is developed all the way through the emulsion layer. This means that the developed image, when viewed both front and back, must appear equally dense.

Following development and a short wash the blackened image is removed in a bleaching bath. After bleaching, the film is washed, re-exposed, redeveloped, washed and dried. For formulas and detailed instructions, contact the manufacturer of the brand of plate or films you are using.

### Image Reverser

**Q:** In using an image reverser we find that separation negatives must be exposed and developed differently than when shooting straight through the same lens. What could cause this?

A. D. F., BROOKLYN

**A:** The difference in exposure may be attributed to a general loss of light in the reverser plus the selective ab-

sorption of the reflecting surfaces. If the reflecting surfaces do not reflect equally all of the wavelengths of light, the ratio of the wavelengths in the image beam is altered. This would necessitate a change in exposure and filter factors as compared to shooting through the lens alone. The development change may be caused by a change of image contrast due to flare introduced by the reverser. You may be able to minimize the latter by keeping the reflecting surfaces absolutely clean.

### Self-Help Kit

**Q:** In a recent issue of *ML* reference was made to a self-help kit designed to aid the beginner in litho photography, halftone, etc. From whom is it obtained? Is there a modern text devoted to halftone photography? The latest I can find was printed before the advent of the shutter on a lens.

K. L. H., CHICAGO

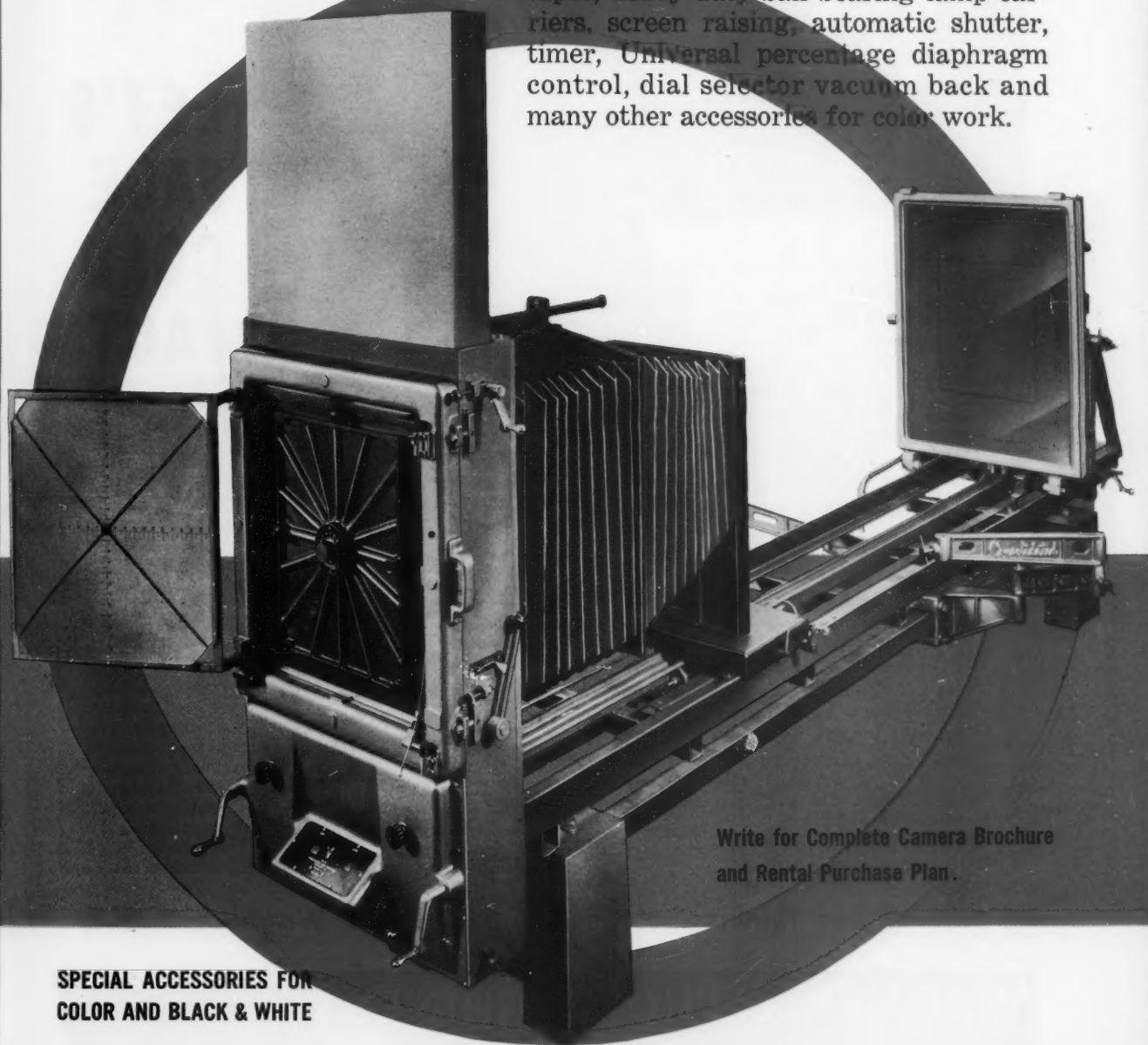
**A:** The self study kit is published by the Lithographic Technical Foundation, 131 East 39th St., New York. Your inquiry was forwarded to Mr. Charles Shapiro, manager of LTF's Educational Department. LTF also publishes several books on the photographic operations in lithography. Although there are relatively few books devoted exclusively to line and halftone photography, there are many texts on graphic arts processes that contain worthwhile chapters on the camera operations. The following were definitely published after the  
(Continued on Page 137)

# THE INDUSTRY'S BEST BUY...

## THE CONSOLIDATED PROCESS DARKROOM CAMERA 24" - 31"

is designed to fill the great need of a precision built, low priced production camera capable of producing a larger volume of finer quality black & white work and equipped to produce color process by the indirect method.

An ideal, all purpose camera with enclosed back, inside and outside focusing tapes, heavy duty ball bearing lamp carriers, screen raising, automatic shutter, timer, Universal percentage diaphragm control, dial selector vacuum back and many other accessories for color work.



Write for Complete Camera Brochure  
and Rental Purchase Plan.

SPECIAL ACCESSORIES FOR  
COLOR AND BLACK & WHITE

# CONSOLIDATED INTERNATIONAL

EQUIPMENT AND  
SUPPLY COMPANY

1112 N. HOMAN AVE. • CHICAGO 51, ILLINOIS • Phone BRunswick 8-4000

330 W. 26th ST. NEW YORK 1, N.Y. • 1430 VENICE BLVD. LOS ANGELES 6, CAL. • 1190 BENNINGTON ST. EAST BOSTON 28, MASS.  
PHONE ALGONQUIN 5-4950      PHONE RICHMOND 8-2186      PHONE EAST BOSTON 7-2921

• 420 MARKET ST. SAN FRANCISCO 11, CAL. PHONE EXBROOK 7-1521 •



## LET'S FACE COLD FACTS

**Fact 1** For more than 60 years Wagner Litho Machinery Company has been the **only** machinery manufacturer building **exclusively** for the Metal Decorating Industry.

**Fact 2** Our business is to design—engineer—supply and install complete lines of metal decorating equipment **exclusively** for the Metal Decorating Industry. **No one else can make this statement.**

**Fact 3** The years of practical experience plus the know-how and skill of our entire Engineering Staff are **exclusively** devoted to the continued improvement of Metal Decorating productive methods and machinery.

Thinking of changes in your production line ? Of adding a new machine ? If so, call upon Wagner Engineering. There's no obligation.

### THE WAGNER LINE INCLUDES:

ROTARY-AIR OVENS  
D.E.F. OVENS  
AUTOMATIC STRIPPERS  
ROLLER REVOLVING MACHINES  
LABORATORY COATERS  
SYNCHRONIZING DRIVES  
VARNISHING MACHINES  
SPOT COATERS  
AUTOMATIC FEEDERS  
AND  
OTHER SPECIALIZED EQUIPMENT

**When thinking of Progress—think of Wagner!**

## WAGNER LITHO MACHINERY

Metal Decorating Machinery

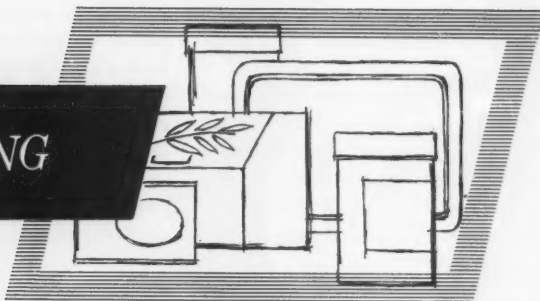
555 Lincoln Avenue, Secaucus, N. J.



*Division*



## METAL DECORATING



**Quality Control — A Measure of Performance for**

## Metal Decorating Inks

By **R. H. Scott**

Sinclair and Valentine Co.

AS the size and complexity of the American industrial machine has grown and expanded, the job of measuring the quality of its output also has mushroomed. This problem of controlling the manufacturing operation is involved and in many cases, extremely difficult.

In the manufacture of most hard goods, machinery and equipment, very close limits of quality can be maintained. The use of very precise instruments permits an exact measure of such characteristics as size, shape, finish, operating performance and other details. We have even seen the introduction of electronic devices for the continuous inspection of properties during the manufacturing cycle.

Some industrial operations, however, are not capable of precise measurement or control. They depend in greater degree upon the skill of the operator to obtain and maintain uniform high quality. The graphic arts industry is a typical example of a field in which exact measurement of either the manufacturing process or its component parts very often cannot be made. It has only been in recent years that instruments have been developed which begin to measure some of the product qualities and performance characteristics of our industry. We have seen the development of



R. H. Scott

specific techniques and instrumentation for predicting and controlling uniform quality in the finished printed material. A great deal of work is being done, with increasingly successful reports, in the statistical evaluation of print quality. While it is always very difficult to determine these qualities numerically, it has been possible with some of these new procedures to make comparative evaluations by which practical standards of uniform quality can be maintained.

### **Instrumentation Expanded**

Instrumentation also has become more available to the graphic arts industry. The uniform qualities of the printing surfaces, including paper, board, metal and others, can now be determined, specified, and held within close tolerance. Adaptations of basic

photo-electric devices are being used to measure color shade uniformity across the printed surface, depth of printed film, gloss and even the accuracy of register in multi-color operations. This instrumentation admittedly has had to be introduced with careful consideration of the personal contribution made to the success of a printed job by the highly skilled craftsmen in the industry. Since a great deal of the success of the visual presentation in a printed sheet is the result of the personal judgment of designer, pressman, color critic and others, great care has been exercised to insure the correct interpretation of the printed result before committing it to instrumental control.

### **More Rigid Standards**

As these techniques for improving control over manufacturing in graphic arts production have been growing in acceptance, more rigid standards have also been imposed on the performance qualities of the printing inks which form an integral part of the success of the printed result. Since the end result in the printing industry depends on the proper combination of its component parts, the co-operation of the manufacturers of paper, plates, blankets, and others, as well as the manufacturers of printing ink had to be obtained before quality control of the printed result could be successful. Each element in

the process has had to be defined, to determine the optimum qualities which can be obtained in production on a reproducible basis.

#### **Ink Supplies Color**

Printing ink supplies the color to the printing operation. It must, therefore, be a combination of the proper pigment color and the vehicle necessary to carry this color through the printing operation to the printed sheet. It must also serve to give the end result the special properties of fast drying, gloss, resistance to abrasion, and other characteristics required of the end product. Ink makers have also found it necessary to include in their formulations additional materials, either as component parts or as special additives, for particular results. These must all be put together in a balanced combination in order to produce the desired film properties, and to insure uniformity not only during a given printing operation, but also from one job to the next.

A great deal of the evaluation of printing ink properties traditionally has been made by skilled formulators and color matchers who have been able, from their long experience, to measure personally printing ink qualities. However, just as instrumentation throughout the graphic arts has been growing, we have also seen the introduction of many devices designed to measure and control printing ink quality. In addition to their own individual efforts, printing ink makers have worked closely with graphic arts groups in resolving this problem of quality control. The Lithographic Technical Foundation inkometer, for example, has become standard equipment with ink makers across the country.

#### **Research Group**

As an effective means of stimulating intensified work on the development of proper instruments and controls, as well as to develop a more basic understanding of their product and its qualities, the manufacturers of printing ink established the National Printing Ink Research Institute at Lehigh University. Over the last

10 years, from this pioneering activity, we have seen a steady growth in scientific understanding of the behavior of printing inks. There has been a continuing study of rheology, or the flow properties of printing ink systems, which will eventually enable ink makers to predetermine and measure how an ink will behave in the printing process. Instrumentation has also been a subject of investigation. Introduction of the NPIRI production grindometer has permitted quality control over the fineness of grinding in ink manufacturing. A standard set of test methods has been developed, and is being continually refined, which will permit a high degree of reproducibility in printing ink characteristics and performance. A drying time recorder is now being introduced which will permit close and accurate measurement of the time required for ink film drying. Other instruments will surely result from this work. Some of the most basic work in printability and the methods for measuring printing quality have been done at the institute.

#### **Metal Decorating Inks**

To the metal decorating industry, these efforts to define and limit the performance qualities of printing ink, as well as to predict their stability and uniformity on the printed sheet are most important. The increased use of color, the application of new designs, the growth of process printing in metal decorating, all require increasingly rigid control of the printing cycle. Stricter requirements in processing the finished metal sheet call for special pigments to meet the demands for a variety of baking cycles and to resist bleeding in an increasingly wide range of package contents. Vehicles have had to be improved to provide increased gloss, tougher films, greater flexibility and resistance to discoloring. In addition, the increasing use of wet ink varnishing calls for a careful balance of ink and varnish formulations.

As the requirements for uniform printing ink quality, as well as for optimum press performance, increase, it is more important than ever that

*(Continued on Page 134)*

#### **New Metal Research Begun**

Sullivan Powdered Metals, Inc., Cleveland, announced Feb. 14 the formation of a new research and development division which will work in cooperation with the research laboratories of Aluminum Company of America, Pittsburgh. The new division will be devoted exclusively to the development and application of special blends of aluminum pastes and powders for use as pigments in plastics, paper coatings, printing inks and fabric finishes.

Most important phase of the new division's work will be in the development of new formulae to combine aluminum with other materials, especially for the plastics and printing fields, said Thomas L. Sullivan, head of the new organization. The new division has thus far developed several new formulations and now is ready to apply them to problems found in offset printing with metallic inks, Mr. Sullivan said.

#### **Continental Reports New Records**

New high records for both sales and earnings in 1956 were attained by Continental Can Co., it was announced last month in a preliminary report by Gen. Lucius D. Clay, chairman of the board. Combined net income for the year, including that of Hazel-Atlas Glass Co. and Robert Gair Co., both firms merged into Continental during 1956, was \$88,861,000, an 8.8 percent increase over 1955.

#### **Reynolds Metals Names Shehan**

Harold T. Shehan has been named assistant manager of Reynolds Metals Co.'s paper and printing market, it was announced last month at the aluminum firm's sales headquarters in Louisville. Mr. Shehan, in his new position, will be concerned with the marketing of aluminum foil products to the converting industry.

#### **Rise In Can Production**

Can production in the U.S. reached a record 39.4 billion containers during the first 11 months of 1956, an increase of approximately 2.7 billion units over the same period in 1955, it was reported by American Can Co.



## LITTLE BENJY 1 Step Wash-up Solvent

CLEANS ROLLERS FASTER, SAFER, BETTER THAN ANY OTHER METHOD

Try this. A few drops of Little Benjy on a small area of a badly scaled and dirty roller. In just fifteen seconds, wipe away all pigments, glaze, and gum left deep in the roller by ordinary solvents. See how effective Little Benjy can be in removing the toughest scale deposits.

See the results obtained in repeated field tests: reflex blue to pastel yellow in fifteen minutes, under typical pressroom conditions!

WRITE FOR  
**FREE**  
TRIAL KIT



We'll supply the dropper, sample can of Little Benjy, and brochure showing actual test results. Don't delay . . . write today.

# KNOX

SOAP COMPANY

3300-22 WEST CERMAK ROAD-CHICAGO 23, ILLINOIS, U.S.A.

# READERS:

## *Are you taking full advantage of your lithographic magazine?*

THE staff of *Modern Lithography* has been trying, in several important ways, to make the pages of your magazine more valuable to you. Increased in-person coverage of litho club and trade association meetings has been one way. Interpretative articles on subjects of vital interest to you is another. That's the reason for our recent series on presensitized plates, metal decorating, elements of photography in the litho shop, color stripping, and visits to typical litho shops and for our expanded coverage of the litho news in all parts of the United States and foreign countries.

Our climbing circulation figures indicate your appreciation of our efforts. But are you taking full advantage of your lithographic magazine? In past months, many of you have availed yourselves of the services of our two regular columnists, *Theodore C. Makarius* (Press Clinic) and *Herbert P. Paschel* (Photographic Clinic). The purpose of this page is to remind you that if you have a troublesome problem regarding press or camera, these specialists are ready to help you solve it. If you are a subscriber to ML and have a question, why not jot it down on the coupon below and send it along to us? We'll be glad to help you, and the service is free.

---

### MODERN LITHOGRAPHY

Box 31, Caldwell, N. J.

☐ Mr. Makarius  
(Press)

☐ Mr. Paschel  
(Photography)

**My Question:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(Only your initials will be used)

Name .....

Company .....

Address .....



## PRODUCTION CLINIC

By Theodore Makarius



# Gumming Plates, Making Reruns

### Gumming Up Plates

*Question: I would like your advice on the attached printed sheet which was given to me by a friend. Pay no attention to the double print as this sheet was run right after having the blanket off.*

*Here is the difficulty. He claims that he can make a plate which will run all day long and stay just as nice as one could wish until such time as he gums up the plate at lunch time or for some other reason. This particular plate was running very nicely as far as copy and stock would permit when he gummed it up and went for lunch. After coming back from lunch, he got this result.*

*Do you know of any one who has this problem? It happened to me on a number of occasions years ago and I am frank to admit that I never was able to find anyone who could solve this problem.*

*I will appreciate very much your advice and reactions to the above.*

*Answer: The streaks are gum cracks which usually are caused by gumming without rolling up the plate and failing to rub the gum smooth. Where heavy streaks of gum lay too close to the base of the dot, the plate will not roll up smoothly.*

*The sheet submitted is blind or sharp all over and has the appearance of too strong a fountain etch being used. Whenever a sheet looks like this, the plate runs sharp and at the same time becomes very sensitive. Rubbing up this sort of plate becomes difficult because the non-image areas*

*are too sensitive to grease. If all of this applies to the case at hand I would suggest using less acid in the fountain water and more gum. Keeping the pH above 3.8 and using four ounces 14° Baume gum to three gallons of water should help.*

*I assume that the plate is fanned dry after each gumming for this in itself will help this condition. It may also help to take a pH reading of the gum to be sure that it is not desensitizing the image where the sponge removes the ink in gumming up.*

### Rerun Is Poor

*Question: From time to time we reprint jobs consisting of halftones and type matter, and find that the result of the second run does not compare favorably with the first printing. The sheets submitted are a good example of what we are up against. Sheet marked "A" was run last year and sheet "B" was run recently. On sheet "A" you will note that the halftones are clean and sharp and the type matter is good and black. The sheet marked "B" on the other hand looks very poor in both type and halftones; all the highlights look hazy and flat and the deep tones are gray. The whole thing looks "fatty" and lacks contrast.*

*In each case, new deep etch plates were made from the original positives. We have a feeling that possibly something went wrong in making the plate for the second run because the plate did not show any sign of greasing in the non-image area or in the*

*type which would ordinarily be the case if press operations were at fault.*

*Answer: The sheet marked "B" has all the indications of having been run on a press that had not been made ready properly. While the image looks light, the dense tones are filled slightly and look gray. In one portion the fibers of the paper have lifted considerably, causing the halftone to look sandy. This would indicate that there was excess pressure between plate and blanket. The "fatty" appearance you speak of is very likely due to the presence of oil or grease in the rubber blanket. Wherever a poor solvent is used for washing blankets, this sort of print always results. The oil in the blanket spreads the dot slightly and invariably prompts the pressman to run less ink, which in turn makes a very gray print.*

*The fact that the fibers started to lift in spots may also have influenced the pressman's decision to soften the ink, making the print still flatter.*

*In cases of this nature the wrong approach to the problem may make it impossible to find a satisfactory solution. For instance, were the surface of the paper hard enough, the print could be improved by simply running a stiff ink, and after enough impressions were run, the blanket would have lost a great deal of the excess oil. The print would show more and more improvement as the run progressed.*

*However, if excess pressure were*  
(Continued on Page 137)



A view of the proofing department of Allied Litho Plate Company....

Extra Large Ink Rollers

New Instant Plate Clamping

Improved Dampening System

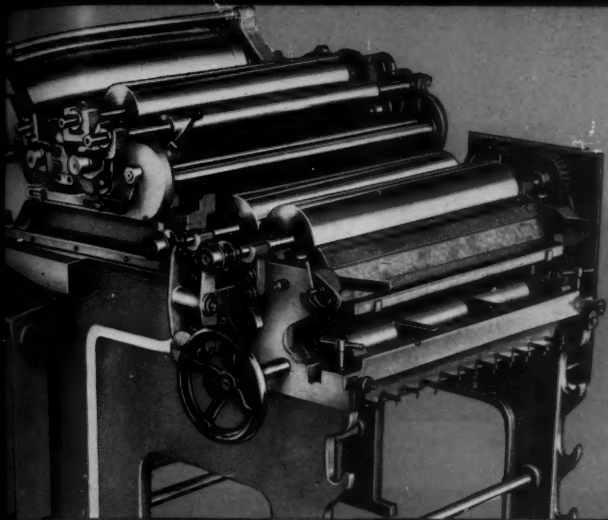
in sizes to fit every need

Type	Plate Size	Length	Width	Net. Wt.	Gross Wt.
1 C	17" x 22"	10' 6"	4' 3"	4,190	4,840
2 C	25" x 36"	12' 2"	5' 3"	6,250	7,705
3 C	32" x 45"	14' 3"	5' 11"	9,250	11,150
4 C	36" x 50"	17' 5"	7' 10"	13,230	15,430
5 C	40" x 56"	18' 5"	8' 2"	14,180	16,420

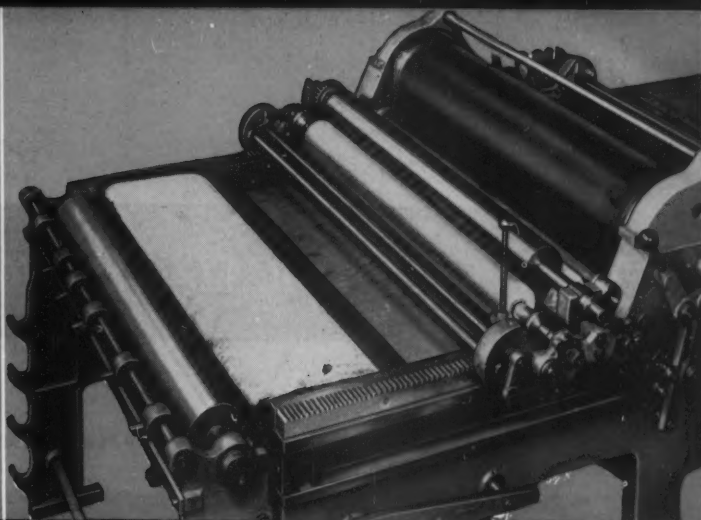
## CONSOLIDATED MAILANDER OFFSET PROOFING PRESS

Precision engineered for high quality proofing that can duplicate actual press conditions, these presses, with automatic inking and dampening, are very practical for short commercial runs on paper, wood,

metal sheets, glass, plastic and other materials. For complete versatility, ease of operation, economy and efficiency in the shop, the Consolidated Mailander is, invariably, the choice of proofing experts.



**The Inking Mechanism**



**The Dampening Mechanism**

any.... **One of Chicago's uppermost trade lithographers**

*Type "C"*  
**automatic inking  
and dampening**



Allied Litho Plate Company shares the honors with their parent company, Allied Engraving, of being one of the most progressive and fastest growing plants in Chicago.

Their choice of the Consolidated Mailander Offset proof press was dictated by the necessity of combining speed and economy with superlative color rendering on proofs that must match actual press conditions.

Consolidated Mailander Offset Proofing presses are available in five sizes; with automatic inking and dampening; power driven; and manual. Color proofs from 20 to 40 minutes per color is routine speed. Instant wash-up, NEW manual KWIK-KLAMP plate clamp, NEW three-roller dampeners and inking rollers assure a surplus of ink and water distribution.

Color lithographers in their standardization program are demanding proofs under actual press conditions. Many leading color printing plants are equipping themselves to pre-proof all their work from various trade sources to attain standardization and uniform quality of the finished job. Write us today for further information.

**CONSOLIDATED INTERNATIONAL**

**EQUIPMENT AND  
SUPPLY COMPANY**

**1112 N. HOMAN AVE. • CHICAGO 51, ILLINOIS • Phone BRunswick 8-4000**

330 W. 26th ST. NEW YORK 1, N. Y. • 1430 VENICE BLVD. LOS ANGELES 6, CAL. • 1190 BENNINGTON ST. EAST BOSTON 28, MASS.  
PHONE ALGONQUIN 5-4950      PHONE RICHMOND 8-3806      PHONE EAST BOSTON 7-2921

• 420 MARKET ST. SAN FRANCISCO 11, CAL. PHONE EXBROOK 7-1521 •



## TECHNICAL SECTION



# LTF Color Chart Now Available

By Jack W. White

Lithographic Technical Foundation

**S**IR ISAAC NEWTON was one of the first to attempt to bring order into the field of color. He devised a simple color circle with the colors positioned as they are in the spectrum. Later, other workers introduced more elaborate and complicated systems which took into account gradations toward black and white.

Albert Munsell developed a color notation system. It presents in orderly fashion and in three dimensions, pure colors, intermediate tints, shades and tones. This system provides for accurate notations and a collection of color samples. A similar system which permits specification of a color and provides a set of permanent color standards was developed by Wilhelm Ostwald. Both the Munsell and Ostwald systems are used extensively in the paint, dye and fabric industries for setting up color standards and specifications. However, these systems and samples do not lend themselves readily to practical use by craftsmen in the printing industry.

### Simple Chart Needed

A simple chart has been needed that is made with printing inks and shows screened tints. Such a chart can aid craftsmen in estimating what

*LTF announced that the color chart will be ready early in March. Sets of negatives will be available at \$150.00 per set of each to members and at \$300.00 to non-members. The chart was developed after research by Frank Preucil, Bruce Tory and Edward Brody, all of LTF.*

color values will be produced on the press sheet by different halftone values on film or on the press plates.

A good color chart must be compact and easy to make as well as simple. It should have enough color combinations and values to minimize guessing in comparing the copy with the chart. At the same time, it should not have so many values that it takes too long to locate a given color. The colors shown on the chart should be organized so that the various hues are grouped. Finally, all this information should be on one sheet.

Charts designed in the past had some of these features. Few, if any, had all of them. Some of the charts were difficult to make and only the larger printing houses could afford to spend the necessary time and money.

The LTF Color Chart meets all of the important requirements for a

good color chart, as well as providing a means for standardizing color printing. It shows 1,760 different color combinations made with two, three and four colors. The different hues are grouped so that it is easy to find a color patch to match the copy. It is compact and can be run on one sheet. Much time and expense are saved because the lithographer is able to get standardized platemaking negatives or positives.

The major aim of all of LTF's research is the development of knowledge and tools that permit greater standardization and help increase the ability of a lithographer to control his work so that he can consistently produce exactly what is required. In this respect, the most important feature of the LTF Color Chart is that it *has to be printed* in the lithographic plant that will use it.

### Produced in Shop

A color chart has meaning only when it is produced under conditions that are known to the individual lithographer and which are under his control. Charts which are printed in one plant and then sold for use in another plant can be misleading. The reason for this is simply that you can duplicate the colors shown on a chart only when you can also duplicate the



# NORTHWEST



# *Pedigreed Papers*

always make good printing better



THE NORTHWEST PAPER COMPANY, Cloquet, Minnesota



# NORTHWEST

# *Pedigreed Papers*

## PRINTING PAPERS

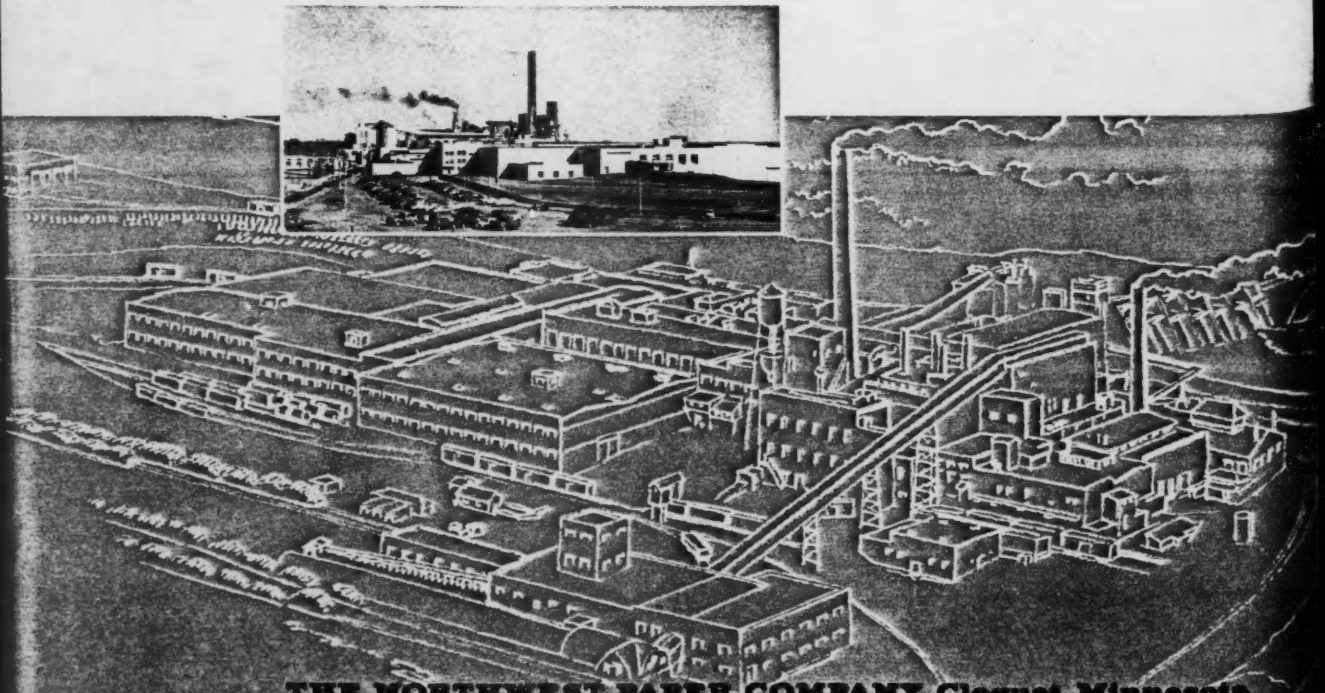
Northwest Ultrawhite Opaque  
Northwest Velopaque Text  
Northwest Velopaque Cover  
Mountie Text  
Mountie Offset  
Northwest Bond  
Northwest Ledger  
Northwest Mimeo Bond  
Northwest Duplicator  
Northwest Index Bristol  
Northwest Post Card  
Mountie E. F. Book  
Mountie Eggshell Book  
Carlton Bond  
Carlton Mimeograph  
Carlton Ledger  
Carlton Duplicator  
North Star Writing  
Non-Fading Poster  
Map Bond

## ENVELOPE PAPERS

Mountie  
Northwest  
Nortex White  
Nortex Buff  
Nortex Gray  
Nortex Ivory  
Carlton

## CONVERTING PAPERS

Papeteries  
Drawing  
Adding Machine  
Register  
Lining  
Gumming  
Raw Stock  
Cup Paper  
Tablet



**THE NORTHWEST PAPER COMPANY, Cloquet, Minnesota**

**Sales offices:**  
Chicago 4, 20 North Wacker Drive  
Minneapolis 2, Federal Tower  
St. Louis 3, Shell Building

This Advertisement Produced Upon NORTHWEST VELOPAQUE TEXT - 5014

U·M·I

ADVERTISING PAGES 69 AND 70 ARE MISSING.

7



VER SPR







### Fill Her Up, Sir?

These words, so familiar in America, symbolize the accomplishments of the petroleum industry which through research, manufacturing skill and service has contributed so much to the progress of our nation.

Printing papers, too, play a key role in our American way of life. They help educate our children, inform our citizens, speed business operations and sell the products of industry. Oxford's business is to make printing papers that will perform these vital tasks more effectively. Among these papers are many designed for specific printing requirements and end uses. For helpful advice on printing papers, call your nearby Oxford Merchant or write our nearest office.

 **xford Papers**  
*Help Build Sales*

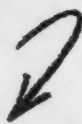
**OXFORD PAPER COMPANY**  
OXFORD MIAMI PAPER COMPANY

230 Park Avenue, New York 17 ★ 35 East Wacker Drive, Chicago 1



PRINTING PAPERS FOR BOOKS, MAGAZINES, COMMERCIAL PRINTING, BUSINESS FORMS AND PACKAGING

**This insert is a sample  
of the offset results  
you can get on**



# OXFORD



## Wescar Gloss Plate Offset

**OXFORD PAPER COMPANY**  
**OXFORD MIAMI PAPER COMPANY**

**W**ESCAR GLOSS PLATE OFFSET is a film-coated (pigmented) paper of high brightness and opacity, polished to a glossy finish. It lends luster and detail to offset printing in either black and white or multicolor. Especially recommended for calendars, booklets or catalogs in full color.

**WESCAR SATIN PLATE OFFSET**, a companion sheet to Wescar Gloss Plate, is also manufactured with a pigmented coating film with a dull satin finish. Designed for black and white or multicolor offset printing, it gives soft, pleasing results in clear detail through a maximum range of tone gradations.

**FENWICK SUPERFINE OFFSET** is a premium grade of outstanding quality and appearance. It is a film-coated paper, highly pigmented for extra brightness and opacity. With a high gloss finish, Fenwick Superfine is admirably suited for de luxe jobs in either black and white or multicolor.

**CARROLLTON SATIN PLATE OFFSET** is a bright white paper of good opacity and regular, uniform surface. Free from lint or fuzz, it is carefully manufactured to give trouble-free press performance. Carrollton Satin Plate is recommended for quality reproduction at moderate cost.

**TWO VALUABLE AIDS:** (1) *The OXFORD PAPER SELECTOR CHART* helps you select the right grade of paper for each job. (2) *The OXFORD PAPER COST CALCULATOR* quickly gives the exact cost per 1000 sheets for common weights and sizes of printing papers. Ask your nearby Oxford Merchant or write us direct.

**OXFORD PAPER COMPANY**  
**OXFORD MIAMI PAPER COMPANY**

230 Park Avenue, New York 17 ★ 35 East Wacker Drive, Chicago 1

PRINTING PAPERS FOR BOOKS, MAGAZINES, COMMERCIAL PRINTING, BUSINESS FORMS AND PACKAGING

### Nation-wide Service Through Oxford Merchants

Albany, N. Y. . . . .	W. H. Smith Paper Corp.
Asheville, N. C. . . . .	Henley Paper Co.
Atlanta, Ga. . . . .	Wyant & Sons Paper Co.
Augusta, Maine . . . . .	Carter Rice Storrs & Bement
Baltimore, Md. . . . .	The Mudge Paper Co.
Bethlehem, Pa. . . . .	Wilcox-Walter-Furlong Paper Co.
Boise, Idaho . . . . .	Blake, Moffitt & Towne
Boston, Mass. . . . .	Carter Rice Storrs & Bement
Buffalo, N. Y. . . . .	Franklin-Cowan Paper Co.
Charlotte, N. C. . . . .	Henley Paper Co.
Chicago, Ill. . . . .	Birmingham & Prosser Co.
	Bradner, Smith & Co.
	Marquette Paper Corporation
	Midland Paper Company
Cincinnati, Ohio . . . . .	The Whitaker Paper Co.
	The Johnston Paper Co.
	The Whitaker Paper Co.
Cleveland, Ohio . . . . .	The Cleveland Paper Co.
Dallas, Texas . . . . .	Graham Paper Co.
Dayton, Ohio . . . . .	The Whitaker Paper Co.
Des Moines, Iowa . . . . .	Birmingham & Prosser Co.
Detroit, Mich. . . . .	Chope-Stevens Paper Co.
Fresno, Calif. . . . .	Blake, Moffitt & Towne
Gastonia, N. C. . . . .	Henley Paper Co.
Hartford, Conn. . . . .	Green & Low Paper Co., Inc.
	Carter Rice Storrs & Bement
High Point, N. C. . . . .	Henley Paper Co.
Indianapolis, Ind. . . . .	MacCollum Paper Co.
Kalamazoo, Mich. . . . .	Birmingham & Prosser Co.
Kansas City, Mo. . . . .	Birmingham & Prosser Co.
	Graham Paper Co.
Knoxville, Tenn. . . . .	Louisville Paper Co.
Little Rock, Ark. . . . .	Roach Paper Co.
Long Beach, Calif. . . . .	Blake, Moffitt & Towne
Los Angeles, Calif. . . . .	Blake, Moffitt & Towne
Louisville, Ky. . . . .	Graham Paper Co.
	Louisville Paper Co.
Manchester, N. H. . . . .	C. H. Robinson Co.
Memphis, Tenn. . . . .	Louisville Paper Co.
Milwaukee, Wis. . . . .	Allman-Christiansen Paper Co.
	Sensenbrenner Paper Co.
Minneapolis, Minn. . . . .	Wilcox-Mosher-Leffholm Co.
Nashville, Tenn. . . . .	Graham Paper Co.
Newark, N. J. . . . .	Bulkley, Duntun & Co., Inc.
New Haven, Conn. . . . .	Carter Rice Storrs & Bement
New Orleans, La. . . . .	Graham Paper Co.
New York, N. Y. . . . .	Baldwin Paper Co., Inc.
	Bulkley, Duntun & Co., Inc.
	Green & Low Paper Co., Inc.
	Kennelly Paper Co., Inc.
	The Whitaker Paper Co.
Oakland, Calif. . . . .	Blake, Moffitt & Towne
Omaha, Neb. . . . .	Western Paper Co.
Pawtucket, R. I. . . . .	Carter Rice Storrs & Bement
Philadelphia, Pa. . . . .	Atlantic Paper Co.
	Wilcox-Walter-Furlong Paper Co.
Phoenix, Ariz. . . . .	Blake, Moffitt & Towne
Pittsburgh, Pa. . . . .	Brubaker Paper Co.
	General Paper Corp.
Portland, Maine . . . . .	C. H. Robinson Co.
Portland, Oregon . . . . .	Blake, Moffitt & Towne
Reno, Nevada . . . . .	Blake, Moffitt & Towne
Richmond, Va. . . . .	Cauthorne Paper Co.
Rochester, N. Y. . . . .	Genesee Valley Paper Co.
Sacramento, Calif. . . . .	Blake, Moffitt & Towne
St. Louis, Mo. . . . .	Birmingham & Prosser Co.
	Graham Paper Co.
	Shaughnessy-Kniep-Hawe Paper Co.
	Tobey Fine Papers, Inc.
San Bernardino, Calif. . . . .	Blake, Moffitt & Towne
San Diego, Calif. . . . .	Blake, Moffitt & Towne
San Francisco, Calif. . . . .	Blake, Moffitt & Towne
San Jose, Calif. . . . .	Blake, Moffitt & Towne
Seattle, Wash. . . . .	Blake, Moffitt & Towne
South Bend, Ind. . . . .	Birmingham & Prosser Co.
Spokane, Wash. . . . .	Blake, Moffitt & Towne
Springfield, Mass. . . . .	Carter Rice Storrs & Bement
	Mill Brand Papers
Stockton, Calif. . . . .	Blake, Moffitt & Towne
Tacoma, Wash. . . . .	Blake, Moffitt & Towne
Toledo, Ohio . . . . .	Paper Merchants, Inc.
Tucson, Ariz. . . . .	Blake, Moffitt & Towne
Washington, D. C. . . . .	John Floyd Paper Company
Worcester, Mass. . . . .	Carter Rice Storrs & Bement
York, Pa. . . . .	The Mudge Paper Co.

# Vulcan Duroflex

## OFFSET BLANKETS

Proof For The  
Master Lithographer



50 SCREEN



120 SCREEN



180 SCREEN



250 SCREEN



Lithographed on a 23 x 35 Harris equipped with

THE FAMOUS  
**DUROFLEX**  
OFFSET BLANKET

Another

REEVES

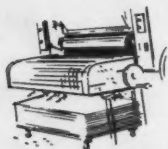
**VULCAN**  
RUBBER PRODUCT

REEVES BROTHERS INC.  
VULCAN RUBBER PRODUCTS DIVISION

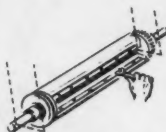
54 Worth Street • New York 13, N. Y.

# VULCAN DUROFLEX

"America's Most Modern Offset Blanket"



**MORE MILEAGE**  
without blistering or  
bruising!



**STRETCH-PROOF**  
long-lasting preci-  
sion fit!



**EVEN GAUGE**  
micrometric uniformity!



**LIFELONG RESILIENCE**  
does not parch or  
flatten out!



**SOLVENT RESISTANT**  
engineered for new  
quick-set inks!



**ANTI-SWELLING**  
no embossing or  
debossing!

This Master Lithographers Proof Card combines most of the difficulties met in producing fine offset work.

Lithography by: Meehan-Tooker Company, Inc. New York City

Type of Press: 23x35 Harris

Blanket: DUROFLEX

Complete information is available from Dept. JT-1

Another  
REEVES  
**VULCAN**  
RUBBER PRODUCT

**REEVES BROTHERS INC.**

VULCAN RUBBER PRODUCTS DIVISION

54 Worth Street • New York 13, N. Y.



conditions under which the chart was printed; and these conditions usually vary widely from one plant to the next.

The conditions in any one plant also are changeable. For this reason, it is wise to reprint the color chart periodically. By making density measurements of the same known areas on the different runs of the chart, you can maintain a continuous check on the plant's operation.

Because the chart can be run on one sheet, it is practical to run it with most of the different inks and papers that you use in your plant. If a new set of inks or different paper is used, or any one of a number of changes is introduced that affect color, the chart can be easily re-run.

The chart is designed primarily for a 22 x 29" sheet. However, all the important information can be run on a 17½ x 22½" sheet for those plants not having larger presses.

Although the major use of the chart will be by lithographers doing four-color process work, its usefulness is by no means confined to this type of work. Basically, the LTF Color Chart provides for an orderly arrangement of combinations of any two, three and four colors. For example, printers doing two-color work can see the full gamut of two-color combinations in a single block in the upper left corner of the sheet. Those doing three-color work can likewise use the six three-color blocks across the top row of the sheet.

#### Other Combinations

Charts can be prepared using other combinations of process ink colors. Label printers, for example, would probably print their charts with dark blue instead of black as the fourth color. In fact, charts can be prepared which will combine any four colors of ink, process or non-process, on a given paper. Such charts can be of great help in fake color work or when pre-separated art is used as it is so extensively in the production of greeting cards.

The LTF Color Chart is one of the most versatile ever available. It can  
(Continued on Page 141)

## TECHNICAL BRIEFS

These abstracts of important current articles, patents, and books are compiled as a service of the Lithographic Technical Foundation, Inc. They represent statements made by the authors and do not express the opinions of the abstractors or of the LTF.

Since some of the abstracts are from abstract journals, LTF cannot furnish photostats of all of the original articles. If the title is marked with an asterisk (\*), LTF has no further information than that contained in the abstract itself. Inquiries about these items should be sent direct to the source that is named. If you want copies of U. S. Patents, write direct to the Commissioner of Patents, Washington 25, D. C. Send twenty-five cents for each patent desired. Make checks or money orders payable to "Treasurer of the United States." British patents may be obtained for forty-five cents from the Patent Office, 25 Southampton Buildings, London, W. C. 2, England, or as is the case with all foreign patents, they may be obtained as photoprints from the U. S. Patent Office, Washington 25, D. C.

If the title of the abstract is *not* marked with an asterisk (\*), LTF can supply photostats of the original article. **NOTE:** When placing orders for such photostats,

please give the **COMPLETE** description of article wanted—**TITLE, AUTHOR, PUBLICATION, and PAGE NUMBERS.** When articles appear in LTF's publication *Research Progress* as well as other publications, *Research Progress* will be sent. The charge for copies of *Research Progress* is thirty cents each to LTF members and one dollar to non-members plus three cents postage. The charge for photostats is sixty cents per page (check abstract for number of pages) plus three cents per page postage. Postage charge for orders from places other than Canada and the United States or its territories and possessions is ten cents per page of photostats or ten cents per copy of *Research Progress*. Orders from companies or individuals who are not members of LTF cannot be filled until payment is received. Orders with payment enclosed receive immediate attention.

LTF also has mimeographed lists of (1) "Periodicals Abstracted by the Research Department" and (2) "Books of Interest to Lithographers." These are available for twenty-five cents each in coin or U.S. stamps. All inquiries concerning these lists and photostats of original articles (not marked with an asterisk) should be addressed to: Lithographic Technical Foundation, Inc., Research Department, 1800 So. Prairie Ave., Chicago 16, Ill.

### Photography, Tone and Color Correction

**PRE-SEPARATED ART TECHNIQUES—AN APPROACH TO LOW-COST COLOR.** Herbert P. Paschel. *Modern Lithography* 24, No. 9, Sept. 1956, pp. 49-53, 167, 169, 171 (8 pages). The Bourges method of preparing pre-separated color art work is described.

**WHITHER COLOR CORRECTION?** Frank Preucil. *The Graphic Arts Monthly* 27, No. 9, September 1955, pp. 66, 68, 70, 72 (4 pages). The incomplete success of some present systems is attributed to lack of understanding of the total problem. The Neugebauer equations, Tobias system, multiple projected masking and fluorescent and prismatic lights are mentioned. The trend of thinking is to more completely understand all color errors involved.

**PROCESS WORK FOR BEGINNERS.** Charles Roeder. *The Graphic Arts Monthly* 28, No. 9, September 1956, pp. 88, 92, 94, 96 (4 pages). Part I of this three-article series describes the equipment and materials needed to make color separation negatives from reflection copy. The author describes how the copy is prepared for shooting and the approximate exposure and development conditions.

**PROCESS WORK FOR BEGINNERS—Part 2.** Charles Roeder. *The Graphic Arts Monthly* 28, No. 10, Oct. 1956, pp. 66, 68, 70, 72 (4 pages). Part 2 of a series of 3 articles on process camera work describes the procedure and materials used to mask color separation negatives. The 3-stop method of making halftone positives is described.

**PROCESS WORK FOR BEGINNERS—Part 3.** Charles Roeder. *The Graphic Arts Monthly* 28, No. 11, November 1956, pp. 76, 78, 80, 174, 176, 180, 182 (7 pages). The Ozachrome method of making color proofs is described. The proofs are made before and after the positives are dot etched so that you can see the difference introduced by the retouching. The procedure and materials used in dot etching are described.

**THREE-COLOR PRINTING—THE ELECTRICAL SYSTEM—Part 5.** Stanley Goldsmith. *American Printer and Lithographer* 137, No. 8, August 1956, pp. 40-41 (2 pages). This is the 5th of a series of articles describing how to make the equipment needed for three-color printing. This article describes the electrical system needed for the enlarging and flashing bulbs used in making the separations.

**THREE-COLOR PRINTING—Part 6.** Stanley Goldsmith. *American Printer and*

# ONLY OXY-DRY GIVES YOU ALL THESE ADVANTAGES



## GREATER PRESS SPEEDS

more impressions per hour

## REDUCES REJECT SHEET WASTE

more deliverable sheets

## PERMITS FULL PRESS LOADS

faster job handling time

## USES LESS OFFSET POWDER

costs less to operate

## FASTER SETTING & DRYING OF INK

less waiting time for next operation

## ELIMINATES STATIC ELECTRICITY

"plumb-bob" jogging on press delivery

## MUCH LESS SERVICE & MAINTENANCE

fill it...set it...forget it operation

ANY one of the above advantages make OXY-DRY superior to all other offset prevention methods. Combined, they give the printing plant that has OXY-DRY equipment, a tremendous competitive advantage that means more business, more profits and more satisfied customers.

If you want to increase the number of deliverable impressions per hour for every press in your plant, then you need OXY-DRY sprayers...write, wire or phone us today for more details. Installations now being made for all press sizes from 17x22 and larger.

# OXY-DRY

## OXY-DRY SPRAYER CORPORATION

NEW YORK CHICAGO SAN FRANCISCO

1134 West Montrose Ave., Dept. ML  
Chicago 13, Illinois

**THE ONLY RIGHT PREVENTIVE  
FOR INK OFFSET**

OXY-DRY SPRAYER CORPORATION ML  
1134 West Montrose Ave., Chicago 13, Illinois  
We are interested in OXY-DRY Sprayers; please  
send more information ☐ or your representative.

Firm Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_  
Individual \_\_\_\_\_

*Lithographer* 137, No. 9, September 1956, pp. 32-33 (2 pages). Detailed instructions are given for making a vacuum board easel with register pins. Two easels are described. One is made to handle three contact screens which have been cut and angled, the other easel can position one screen at each of the three printing angles.

**THREE-COLOR PRINTING—Part 7: SCREENS.** Stanley Goldsmith. *American Printer and Lithographer* 137, No. 11, November 1956, pp. 44, 45, 50 (3 pages). A detailed description is given on how to cut and angle a gray contact screen. In one method three screens are cut for each of the printing colors. In the other method one screen is placed in a holder which can be rotated to the correct screen angles for each of the printing colors.

**THREE-COLOR PRINTING—Part 8: TRANSPARENCY HOLDERS.** Stanley Goldsmith. *American Printer and Lithographer* 137, No. 12, December, 1956, pp. 43, 44, 46 (3 pages). Part 8 of a series on three-color printing shows how to make a transparency holder for the enlarger. Complete construction details are given.

**MECHANICAL COLOR REGISTRATION.** H. W. Barnhart. *The National Lithographer* 63, No. 11, November, 1956, pp. 38-39 (2 pages). A method of obtaining register with a mechanical system of pins and punched film is described. The punched film is placed over pins set in the camera back. The processed films are then placed on another bar with pins for assembling and stripping.

**ESTIMATING COLOR.** Harold Mobus. *The National Lithographer* 63, No. 3, March 1956, pp. 48-49 (2 pages). The reproduction characteristics of ten types of copy for lithographic color reproduction are described.

**MASKING—WHY DOESN'T IT WORK?** John Pince. *The National Lithographer* 63, No. 3, March 1956, pp. 32, 33, 34 (3 pages). Many variables in exposure, development, halftone screening, platemaking, and presswork are discussed in relation to their contribution to color unbalance and quality loss. Masking is considered as the means of adjusting a job to the inks and paper to be used and failure to be expected when this information is unknown or ignored.

**CONTACT SCREENS FOR HALFTONE—Part I.** Frank H. Smith. *Modern Lithographer and Offset Printer* 10, October, 1956, pp. 17-18 (2 pages). A short treatment of the history of contact screens is given. The method of making contact screens is described. Some of the advantages of using contact screens are discussed.

**AUTOPOSITIVE FILM: AID FOR MAKING COMPOSITE NEGATIVES.** C Weston Simonds and Edward H. Groet. *Printing Equip-*

*ment Engineer* 87, No. 1, October, 1956, pp. 57, 58, 82, 83 (4 pages). Autopositive film, when exposed to white light, will produce a latent image which can be erased by an exposure of yellow light. This effect is reversible for several cycles. Examples are given to show how this material can be used to assemble complicated subjects from separate negatives or positives.

### **Planographic Printing Processes**

**KODAK LITHOFOIL SHEET.** Anon. *British Journal of Photography* 103, No. 5033, Nov. 2, 1956, p. 557 (1 page). Lithofoil is a thin aluminum sheeting with one side satinized and coated with a very stable light-sensitive layer. It can be stored for considerable periods without danger of dark reaction. Exposure is to a high pressure mercury arc in the usual vacuum frame. Plate is developed by swabbing with developer, then with stabilizer, inked and gummed with a regular lithographic gum solution.

**DEVELOPMENTS IN LITHOGRAPHIC PLATE-MAKING.** Bernard Sears. *Modern Lithography* 24, No. 10, October, 1956, pp. 62, 63, 64, 159 and 161 (5 pages). Article lists and briefly discusses the major improvements in lithographic platemaking materials and methods since 1922. Improvements in film, arc lamps, cold cathode lamps and camera composition methods are mentioned as well as the use of Photolacs, double printing methods and stripping wet films to blue keys. Various dot etching and intensifying techniques and materials along with staging varnishes that adhere to wet film are included. Factors influencing the extended life of plates such as deep-etching polymetallic plates and vinyl lacquers are also discussed.

**\*SENSITISED PRINTING PLATES.** British Patent 756,277. *Printing World* 159, No. 20, November 14, 1956, p. 523. Polychrome Corporation of New York invent a photographic printing plate, e.g. for use in offset work, using a diazo compound on its surface. The plate has a wet strength paper base covered by a water-proof coating, and then a starch surface on which the photosensitive diazo rests.

### **Lithography—General**

**NEW INK STANDARD AIDS COLOR LITHO.** Anon. *Modern Lithographer and Offset Printer* LII, No. 3, March, 1956, pp. 37-38 (2 pages). The new British Standard four-color offset inks B.S. 2650 were selected considering the best hues possible with good working properties, light fastness, insolubility in water, and acceptable cost. Advantages of use will be of great help to retouchers and consistent masking. Also discussed is the reproduction of grey, black, and undercolor removal.

**THE BEST RETOUCHING DEPARTMENT IN THE WORLD.** Anon. *Modern Lithographer*

*and Offset Printer* LII, No. 10, October 1956, pp. 19, 20, 22 (3 pages). The best features of American, British and Continental design have been combined in the new retouching department of Brown, Knight and Truscott at Tonbridge. Roofed in cubicles, desks, lighting arrangements and room layout are illustrated. Retoucher's chairs to minimize fatigue are thought to increase efficiency.

**QUALITY CONTROL.** Stanley R. Rinehart. *Modern Lithography* 24, No. 11, November 1956, pp. 43, 44, 45, 151 (4 pages). The author discusses the basic concepts of quality control and their applications to a program of in-process control of color in his plant. The results after a year and a half show that the program has been successful although further development of procedures and instruments for color control is planned.

### **Graphic Arts General**

**THE USE OF SYNTHETIC FIBERS IN PAPER.** John R. Emery, J. Donald Howell and Seymour Sands *TAPPI* 39, No. 11, November 1956, pp. 781-786 (6 pages). "Dacron" polyester fiber, nylon and "Orlon" acrylic fiber offer a wide range of chemical and physical properties that can be utilized in products made on conventional papermaking equipment. The unique properties of the papers prepared from these fibers should permit their use in many areas in which paper is not normally used. The use of synthetic fibers in papermaking has graduated from the laboratory to the pilot plant phase. This report discusses both the laboratory and pilot plant phases of this investigation. The pilot plant experience described shows that the manufacture of synthetic fiber papers is commercially practical. The range of properties obtainable in papers from 100% "Dacron" and nylon, with and without added wood pulp, are discussed. In pilot plant studies, emphasis was placed on a study of the variables important to a papermaker. These include fiber dispersion and stock preparation techniques, bonding methods, the effects of wood pulp on wet web strength, and drying and calendering. Suggested end uses for these papers are listed.

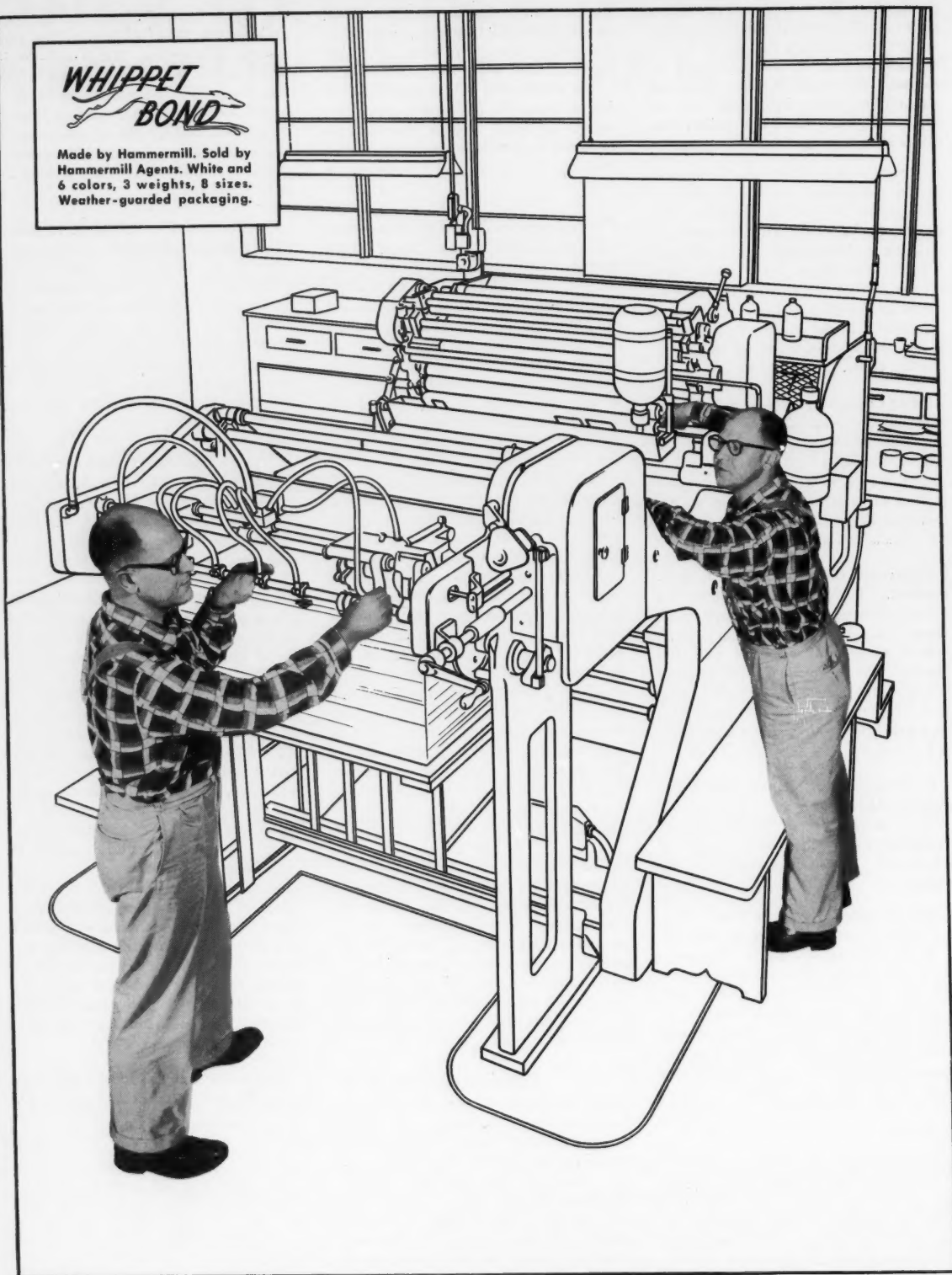
**HANDLING PAPER IN YOUR PLANT.** Dr. Robert F. Reed. *Modern Lithography* 24, (Continued on Page 139)

*Need an extra  
copy of  
MODERN LITHOGRAPHY  
for your shop?  
Subscribe Today*



**WHIPPET  
BOND**

Made by Hammermill. Sold by  
Hammermill Agents. White and  
6 colors, 3 weights, 8 sizes.  
Weather-guarded packaging.



*You don't have to be two places at once when you run  
Whippet Bond on your press*



## LITHO CLUB NEWS



### New York

Members of the New York Litho Club entertained their wives recently at the club's annual Ladies' Night, held at the Biltmore Hotel. Pictured here, seated l. to

r., are Mesdames Daniel Ford, Peter Rice, Angelo Pustorino, Mr. Pustorino; Miss Rose Stattel; Mesdames Arthur Tarling, Thomas Cavalero and William Glover. Standing, l. to r., Mr. Ford, president; Mr. Rice, vice president; Lou Happ, secretary; Mr. Tarling, entertainment committee; Mr. Cavalero, treasurer; and Mr. Glover, entertainment committee.

### Cincinnati

#### Committee Chairmen Appointed

Accumulated business and plans for future meetings and social affairs were discussed by members of the Cincinnati Litho Club at a closed dinner meeting last month at the Golden Goose in nearby Kentucky. The annual dinner dance at the Fenwick Club in January was a successful affair with nearly 300 present. Jack Brannen of Young & Klein, Inc., was the arrangements chairman.

Ben Smith, club president, has appointed the following committee chairmen: Membership, Frank Petersen, Nielsen Lithographing Co.; educational, D. G. Flanagan, Otto Zimmerman & Son Co., Inc.; boatride, Frank Riehle, the Hennegan Co., and picnic, John Rogers, Stevenson Photo Color Separation Co. A new Annual Reports committee is composed of three members of the board of governors, Thomas Lacker, Advance Decalcomania Co.; D. G. Flanagan and Buford Payne.

Officers of the Cincinnati Litho Club for the current year are, l. to r., Peter Schannes, Mail-Way Advertising Co., secretary; Benjamin Smith, The Hennegan Co., president; and Russell Esberger, Tru-Color Offset Service Co., treasurer. Buford Payne of Tri-State Offset Co., vice president, was absent at photo time.



### St. Louis

#### Lewis, Soderstrom At Meeting

R. R. Lewis, Vulcan Rubber Products, Inc., New York, addressed 61 members of the St. Louis Litho Club at their January meeting held at the Alpine Inn. Mr. Lewis' topic was "The Manufacture and Care of Offset Blankets."

Howard Phillips, president, introduced Walter Soderstrom, executive vice president of the National Association of Photo-Lithographers, who told the club that all exhibit space for NAPL's 25th annual convention has been sold. The convention will take place at the Chase-Park Plaza Hotel in St. Louis, Sept. 11-14. Mr. Soderstrom said a closed-circuit TV program is planned tentatively for Sept. 13-14.

### Tulsa

#### Bookbinding Problems Reviewed

"Finishing Operations Confronted by the Bookbinder" was the topic discussed by W. H. Talley at Tulsa Litho Club's meeting last month. Mr. Talley presented many suggestions and pointers on how to avoid problems in getting the printed product finished and ready for delivery.

Mr. Talley has been a partner in Modern Bindery Co., Tulsa, for 13 years. He also spent 17 years with Midwest Printing Co. in Tulsa. In addition to his post at Modern Bindery, he has been in charge of bindery clinics in Oklahoma City, Wichita, Topeka, St. Louis and Des Moines.

### Washington

#### Joint Meeting Held

Washington Litho Club, the Craftsmen Club and the Printing Supply-men's Guild held a joint meeting last month at Hotel Continental. O. C. Holland, director of advertising for Interchemical Corp., IPI, and a specialist in the field of color, presented a program titled "The Use of Color in the Graphic Arts."

## Conn. Valley



David Gandelman, new president of Connecticut Valley Litho Club, receives gavel from Herbert Bauer, retiring president.

### New Officers Elected

David Gandelman, City Printing, New Haven, was elected president of the Connecticut Valley Litho Club at its meeting last month in Hotel Bond, Hartford. Other new officers are Andrew Pagliaro, Holyoke Litho, Holyoke, Mass., 1st vice president; Thomas Murice, Bond Press, Hartford, 2nd vice president; Robert Tangarone, Travelers Insurance Co., Hartford, treasurer; and Edward J. Yuskevich, Davidson & McKirdy Co., Inc., West Hartford, secretary.

Theodore F. Makarius, Pope & Gray, Inc., was guest speaker for the evening. Mr. Makarius, author of ML's Production Clinic, spoke on press and ink problems.

The club's annual Ladies Night party will be held March 16 at Lou Duncan's, Meriden, Conn. The next club meeting is scheduled for April 5 at Hotel Bond.

## Buffalo

### Offset Blankets Discussed

A comprehensive story on the manufacture and use of offset blankets was presented by R. R. Lewis, technical director of Vulcan Rubber Products, Inc., at the February meeting of the Buffalo Litho Club. Mr. Lewis' topic, "Manufacture, Care and Use of Offset Blankets," was followed

by a question and answer session.

New club officers recently elected include Norman Bernhardt, Niagara Litho, president; Donald Pinzel, Sale Litho, vice president; Eugene Edwards, Sale Litho, treasurer; and Edward Sendher, Kelly Letter Service, secretary.

The club directors also elected the following to the board: Arthur Beitz, Niagara Litho; Louis Gruber, and Ted Ziemendorf, Manhardt Printing.

## Chicago

### Harris-Seybold Story Told

At the Feb. 28 meeting of the Chicago Litho Club, Harris-Seybold Co. presented its story of the "First Fifty Years". Ren R. Perry, vice president, sales, narrated the story and was assisted by R. J. Neiderhauser, manager of the sales engineering department, and Joseph McConnaughey, western district manager.

According to Mr. Perry, the first Harris-Seybold offset press was sold in 1907 to Republic Bank Note Co. of Pittsburgh. Recently it was repossessed by Harris and now is at the Cleveland office.

Latest in the Harris line to be described to the Club were the new high speed web fed offset presses, for both black and white and multi-color work.

## Twin City

### Presensitized Plate Program

Cal D. Harmon, sales manager of Lithoplate, Inc., subsidiary of Harris-Seybold Co., delivered a talk on "Professional Plates for the Professional Lithographer" at the February meeting of Twin City Litho Club. Mr. Harmon's talk was accompanied by a demonstration of actual developing of presensitized plates. In addition, he gave a history and a chemical analysis of diazo coatings for presensitized plates.

Edward Koren and Harold Hewlett, Lithoplate representatives, assisted in the demonstrations. The talk covered the progress made to date in presensitized plate preparation and a look at what is expected in the future from

research and product development.

The club will tour the Smyth Printing plant sometime this spring as part of a meeting. Plans also have been set to visit two paper mills in Wisconsin, Consolidated mills and Nekoosa-Edwards mills at Wisconsin Rapids.

## Philadelphia

### Big Crowd for Quiz Night

As usual, the annual quiz night program at the Philadelphia Litho Club attracted the biggest crowd of the year. It was so successful, in fact, that president Stephen Rubenstein suggested that the program be divided into two programs in future years.

Seven local experts participated in the program on Feb. 25, which will be reported in full next month. A program by Harris-Seybold Co., depicting the first 50 years of offset press development, is scheduled for the March 25 meeting.

## Boston

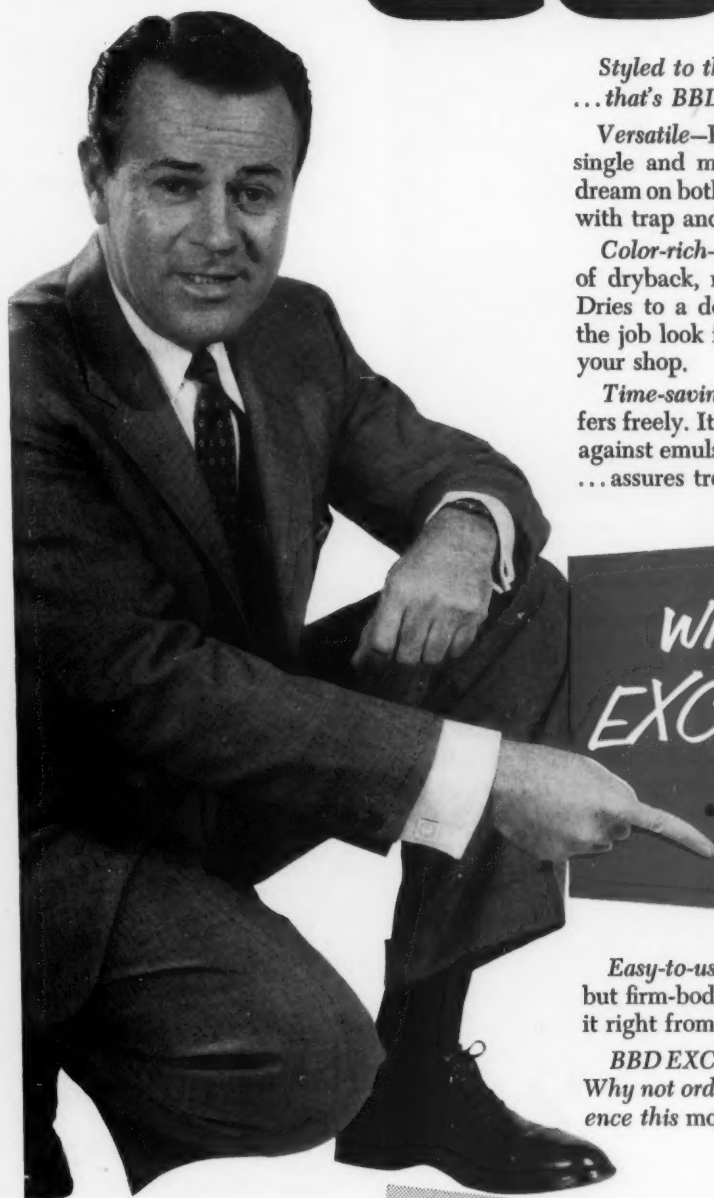


Albert M. Smith, Sr., Boston Litho Club 1st vice president, carries off automatic frying pan he won at the club's Valentine party. Mr. Smith is associated with Smith & Welsh, Inc., combination shop.

### Club Fetes Ladies

Boston Litho Club staged its annual Ladies Night and Valentine dinner dance Feb. 9 at Hotel Somerset, Boston, with an attendance of 300. Each

# GO GO modern



*Styled to the needs of modern offset-lithographers ... that's BBD EXCELLOLITH INK.*

*Versatile*—EXCELLOLITH works like a charm on single and multicolor presses alike ... prints like a dream on both coated and uncoated stocks. Does away with trap and transfer problems.

*Color-rich*—EXCELLOLITH prints without a trace of dryback, retains the brilliance it has when wet. Dries to a dense scratch-resistant finish that makes the job look fresh from the press long after it leaves your shop.

*Time-saving*—EXCELLOLITH sets fast and transfers freely. Its high degree of water-resistance guards against emulsification even when used on spare forms ... assures trouble-free press performance.

with BBD  
EXCELLOLITH INK  
...the modern all-  
purpose offset ink

*Easy-to-use*—EXCELLOLITH has a uniquely soft but firm-bodied consistency that enables you to pour it right from can to fountain. Requires no doctoring.

BBD EXCELLOLITH comes in black and all colors. Why not order a 5-lb. can today and see what a difference this modern offset ink really makes.



**Bensing Bros. and Deeney**  
Better Inks for Better Printing  
3301 Hunting Park Avenue, Philadelphia 29  
CHICAGO      SAN LEANDRO, CAL.  
CAMBRIDGE, MASS.      MONROE, LA.



lady was presented with a TV lamp, gift of the club.

Willard K. Joyce, New England manager for Miehle Printing Press & Mfg. Co., was committee chairman. He was assisted by R. Curtis Reed, New England manager, Interchemical Corp., IPI, Cambridge, Mass.; Anthony C. Fucillo, sales manager, General Printing Ink Div. Sun Chemical Corp., Norwood, Mass.; Jerry Ferragamo, general manager, Boston Offset Co.; and F. Burt Reed, sales representative of W. Oliver Tripp Co.

## Dallas

### Club Tours AnSCO Plant

Members of the Dallas Litho Club visited the local plant of AnSCO Film Co. last month and heard a talk on "The Film Manufacturers' Phase of the Offset Industry" by Adolph Jez, AnSCO's Dallas representative. Also addressing the group was William Hopkins, who spoke on "How to Improve Your Home Color Photography".

James Craft, Commercial Printing and Letter Service, club president, asked the following men to serve on the board of governors: John Baird, A. G. Copeland, Jr., Robert Himes, Steve Kaufman, Don Marquis, T. R. Masters, C. Lee Phoenix, Jr., Henry Phillips, Alvin Taylor, Charles Wilhelm and Fred H. Williams, Jr.

## Houston

### New Club Members

Highlight of the February meeting of the Houston Litho Club board of



Left to right, treasurer, John L. Brand; secretary, Frances Porter and president, Kenneth Joseph pose for the camera following installation ceremonies.

governors was approval of eight applications for membership in the club.

Included in the group of applicants were Clyde Miller, Jr., assistant chief inspector of Champion Paper's Houston Division; Warren Boozer, printing coordinator for Tennessee Gas

(Continued on Page 118)

Has your litho club

completed plans for the

N. A. L. C.

convention in Chicago

May 2-4

Now is the time to plan

for this important convention

Make sure your club is well represented

## Litho Club Guide

### BALTIMORE

Norwood A. Heselbach, Secy.  
720 East Pratt St., Baltimore 2, Md.

### BOSTON

Thomas J. Cain, Secy.  
Hub Offset Co.  
175 Purchase St., Boston 10

### BUFFALO

Vic Reisch, Secy.  
33 Eiseman Ave., Kenmore 17, N. Y.

### CANTON, Ohio

Robert G. Sheppan  
1510 Meadow Park, N.W.  
Canton 9, O.

### CHICAGO

C. Robert Snider, Sec'y  
Low's Reproduction Services, Inc.

### CINCINNATI

Peter Schannes, Secy.  
Mail-Way Advertising Co.  
229 East Sixth St.  
Cincinnati 2, Ohio

### CLEVELAND

Russell B. Waddell  
5308 Blanche Ave., Cleveland, O.

### CONNECTICUT VALLEY

Thomas Murice  
521 So. Main St.  
West Hartford, Conn.

### DALLAS

Lee Phenix  
1802 Akard St., Dallas, Tex.

### DAYTON

Richard Clark, Secy.  
740 Vine St., Piqua, O.

### DETROIT

John Murphy, Secy.  
13100 Santa Rosa, Detroit

### HOUSTON

Chloe Lee Mallet  
2104 Wichita, Houston 4, Tex.

### LOS ANGELES

Ernest A. Szabo  
1323½ W. 93rd St.,  
Los Angeles 44, Cal.

### MILWAUKEE

Allan N. Williams, Secy.  
4463 N. Morris Blvd., Milwaukee 11,  
Wis.

### NEW YORK

Tom Cavallero  
Schlegel Litho. Corp.  
2nd Ave. & 22nd St., New York

### ONTARIO

The Secretary, Ontario Litho Club  
c/o The Canadian Lithographers  
Ass'n., Inc.  
4 Wellington St., E., Toronto, Ont.

### PHILADELPHIA

Joseph Winterburg, Secy.  
622 Race Street, Philadelphia 6  
Meets 4th Monday

### QUEBEC

John Martin, Secy.  
Gazette Printing Co., Ltd.  
1000 St. Antoine St., Montreal, Canada

### ROCHESTER

Roy Bippes, Secy.  
87 Pleasant Ave., Rochester 22, N. Y.

### ST. LOUIS

Eugene J. Hanson, Jr., Secy.  
4440 Bessie Ave., St. Louis 15, Mo.

### TWIN CITY

Marvin Haenze, Secretary  
1405 Chicago Ave.,  
Minneapolis 4, Minn.

### WASHINGTON

H. Thos. Driver, Secy.  
PO Box 952, Benj. Franklin Sta.  
Washington, D. C.  
Meets 4th Tuesday

### NAT'L ASS'N OF LITHO CLUBS

Eugene J. Hanson, Jr., executive sec.  
4440 Bessie Ave.,  
St. Louis 15, Mo.





**neenah says,**

you sell  
letterheads  
after you sell  
the need for a  
letterhead

Save selling time and energy —  
let your prospects sell themselves  
on their need for a letterhead  
by giving them copies of "The  
Right Letterhead for You."



This new portfolio (2nd series)  
demonstrates to executives the  
business principles that  
make a letterhead right for a  
particular company.

Get your free copies of "The Right  
Letterhead for You" from your  
paper distributor handling  
Neenah Fine Business Papers.

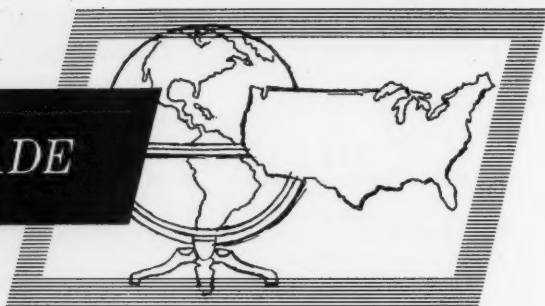


**neenah paper company**

A DIVISION OF KIMBERLY-CLARK CORPORATION

neenah, wisconsin

## NEWS about the TRADE



### Perry New Atlas President

Ralph G. Perry, Atlas Lithographing Co., Pittsburgh, has been named president of the company, it was announced last month. Mr. Perry, who helped start the firm 23 years ago, succeeds H. B. Shute, who has retired. Mr. Shute also was one of the firm's founders.

### Harry Hoffman Dies

Harry Hoffman, 72, founder and president of Harry Hoffman & Sons, Inc., Buffalo, printers and lithographers, died Feb. 13. He came to Buffalo in 1902 and operated the printing plant at 470 Franklin St. for many years. A new plant is now under construction on Jefferson Ave. His wife, two sons and a daughter survive.

### New Cincinnati Litho V.P.

Roderick W. Stewart, sales manager for the Cincinnati Lithographing Co., Inc., since 1949, has been promoted to vice president of the firm, it was announced by Harry E. Brinkman, president.

### Des Moines Firm In New Plant

L & M Lithographing, offset printing firm of Des Moines, Iowa, recently moved to larger quarters where a folding carton division was added. Automatic carton manufacturing equipment has been installed in the new 11,000 sq. ft. plant. The offset platemaking department also has been expanded.

### U. S. P&L Co. Reports Increase

The U. S. Printing & Lithograph Co., Cincinnati, reported net earnings of \$1,866,758 during 1956, equal to \$5.44 per common share. This repre-

sents an increase of about 15 percent over 1955 earnings of \$1,625,486, or \$4.95 a share of common stock. Directors declared a dividend of 50 cents a share on common stock, payable March 1, and a regular quarterly dividend of 62½ cents a share on preferred stock, payable April 1.

### Hostess For POPAI Show

Jeanne Beacham, the newly crowned 1957 Miss Photoflash, has been named



"The POPAI Girl" by officers of the Point-of-Purchase Advertising Institute. Miss Beacham, a Lake Forest College student, will reign as hostess to the more than 15,000 sales and advertising executives, agency representatives, purchasing agents, manufacturers and suppliers of point-of-purchase display advertising items who will attend the 11th annual POPAI show at the Palmer House in Chicago, April 10-12. Shown discussing the dates of the show with the new "POPAI Girl" is Stanley Wessel, Chicago, president of POPAI.

### Smith Consolidates Plants

Oscar T. Smith & Sons Co., Baltimore lithographers, has acquired a seven-story structure, containing 60,000 sq. ft. of floor space. The firm has occupied three floors of the building for some time and recently moved its branch plant into two of the remaining floors.

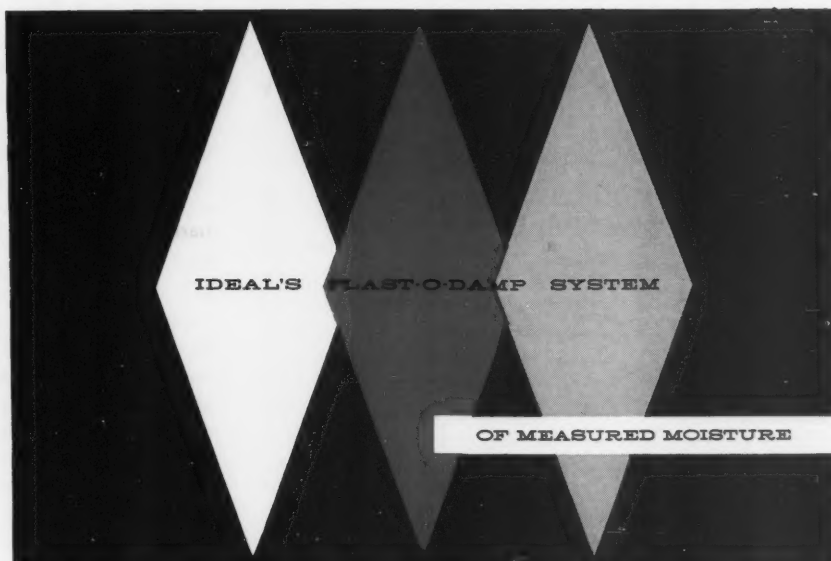
### R-C-S Honors Sales Director

William R. Cockburn, director of sales for Rolph-Clark-Stone Ltd., Toronto, and a company director, is completing 50 years service with the company. The firm's board of directors recently honored Mr. Cockburn at a luncheon where he was presented with an illuminated scroll. Mr. Cockburn is the charter president of the National Sales Executive's Club of Toronto.

### Survey By LNA And NAPL

Mailings were made last month to members of the Lithographers National Association and the National Association of Photo-Lithographers in an effort to determine annual net sales, percent of annual net profit before and after federal income taxes, and expected 1957 profits. An analysis will be made from submitted information and will serve as a basis for a report at the April convention of LNA. The report will be sent to all LNA and NAPL members.

This survey is a continuation of the study of profit trends in the industry begun three years ago. This year's survey will help form the comprehensive report on the profit trends in the industry since the results will be integrated with the survey and with the findings of the surveys conducted in previous years.



## Litho plate moisture can now be controlled!

Simple as A, B, C



With Ideal's new disposable, lintless dampening cover used over Ideal's Plast-O-Damp water form base roller, you can now control plate moisture throughout your press run.

The big advantages of this new and revolutionary dampening system are:

- No dampener to waste
- No resetting of dampeners
- Faster ink and water balance in starting
- No dampener lint

Just roll the Plast-O-Damp covers on when you wish to change. Save money and time with this new system of measured moisture!

Write for descriptive folder.

4  
FACTORIES

IDEAL ROLLER & MANUFACTURING CO.

CHICAGO 8, ILLINOIS  
HUNTINGTON PARK, CALIF.

LONG ISLAND CITY 1, N. Y.  
CHAMBLEE, GEORGIA

## LTF Meets in New York

**M**EMBERS and directors of the Lithographic Technical Foundation last month heard reports of the educational and research work carried on by the Foundation during 1956. The reports were given at the annual meeting of members and board of directors in New York Feb. 19 at the Hotel Shelburne. It was attended by nearly 40 members and directors of the organization.

Wade E. Griswold, executive director of LTF, led off with a financial report for the year, showing the Foundation to be in a good financial position, but in need of additional funds to expand activities.

John Perrin, president of LTF, also discussed the financial picture and the proposed budget for 1957, which later came in for a lengthy item-by-item consideration until late in the day. (A further report on this section of the meeting will be given in the April ML).

Mr. Perrin was reelected president of the Foundation; with Andrew Donaldson as vice president. George Kindred was named treasurer and William Glover, secretary.

New members of the executive committee include Z. Wayne Adams, Harry Brinkman, William Bulkeley, William Glover, and Elmer Voigt. The president and vice president will serve on the executive committee in an ex officio capacity.

Michael H. Bruno, research manager, told of the year's work at Glesner House, the Chicago laboratory. He cited seven major areas of lithographic research, with emphasis on platemaking and related fields. One of the most important achievements of the year was completion, after extensive revision, of the LTF color chart, described in the Technical Section of this issue of ML. Other work was concerned with a survey of color reproduction methods, masking, pick tests for paper, substitutes for asphaltum and gum arabic, and methods of eliminating ink dot scum.

He said the laboratory has found that, surprisingly, quality of color

work turned out on four-color presses often surpasses color jobs put through a single-color press.

Charles Shapiro, who heads the educational side of the Foundation's activities, in the New York office, likewise recounted 1956 activities. He said that, after years of trying, he had at last located a man to analyze the lithographic industry as a basis for preparing educational materials. The first analytical report, on deep etch plates, already has been completed, he told the group. "Not only that," he added, "but the man doing the report, George Halpern, of New York, instead of quitting the job in despair has offered to continue his work on other phases of the offset industry."

Mr. Griswold, turning to prospective plans for reorganizing and streamlining the administrative setup of the Foundation, played a tape recording of some of his comments on LTF and ways it could be made more efficient. No report on this subject was available to ML at press time.

Slides showing the accomplishments of the Foundation since 1944 as compared with the years 1923-1944 also were shown. The greatly expanded membership and research projects in the past 13 years were obvious from the figures presented.

On Feb. 20 most of the LTF members and directors journeyed to Springdale, Conn. to inspect the Printing Developments laboratory of Time-Life Inc.

### Hoover Suffers Heart Attack

George R. Hoover, 41, executive vice president of Joseph Hoover & Sons, Philadelphia, suffered a heart attack Feb. 8 while attending a meeting of the Muscular-Dystrophy Association at the Union League.

Mr. Hoover, president of the National Association of Photo-Lithographers, was chairman of a fund drive for the Muscular Dystrophy Association. When ML checked, Feb. 20, Mr. Hoover still was hospitalized at Bryn Mawr (Pa.) Hospital.

### Harris, Intertype Merger

Two of the most prominent companies in the graphic arts industry announced plans for a merger as this issue of MODERN LITHOGRAPHY went to press late in February.

Directors of Harris-Seybold Co., one of the leading manufacturers of lithographic presses, and Intertype Corp., manufacturer of typesetting equipment, including the recently developed Fotosetter, approved, Feb. 25, a plan to merge the companies, subject to approval by shareholders of both companies.

If the merger is approved, the new company—to be known as Harris-Intertype Corp., would be the most diversified manufacturer of graphic arts equipment in the world, according to a joint announcement. In recent months Harris added three important divisions in its diversification plan: Cottrell Co., the Macey Company and Lithoplate, Inc., manufacturers, respectively, of letterpresses, collators and presensitized plates.

Combined sales of the two companies now approximate \$60,000,000 a year, net earnings about \$5,000,000 and total assets, \$55,000,000.

The joint announcement of the proposed merger came from George S. Dively, chairman and president of Harris-Seybold, and Harry Willnus, president of Intertype. Mr. Willnus would continue as president of Intertype with Mr. Dively becoming chairman and president of Harris-Intertype Corp. Intertype would continue with its present personnel, becoming an autonomous division of Harris-Intertype. The release further stated that "it is contemplated that Mr. Willnus and two other present Intertype directors will become directors of Harris-Intertype."

If the merger is approved, combined employees would total 4800.

### Charleston Litho Moves

The Charleston Lithographing Co. recently moved into new quarters at 33 Hayne St., Charleston, W. Va. Joseph S. Maturo, president, said the move was made to obtain added space for the firm's offset facilities.



## Illinois GAA And Chicago Litho Association Merge; Macready In CLA Post

ARCH MACREADY, former personnel director of the Regensteiner Corp., Chicago, has been selected by the Chicago Lithographers Association to take over the post of executive director, which became vacant when George Mattson resigned to become associated with Printing Industry of America.

Mr. Macready, who observed his 36th birthday anniversary on Jan. 6, was "born in a print shop," figuratively, at least, he said, the shop being that operated by his father and mother in Hollywood, Fla.

In 1950 he began his business experience in the meat packing, steel, metal working and electronics industries. Printers' ink was still in his blood and one year ago he began his service with the Regensteiner Corp. Throughout his career Mr. Macready has specialized in labor relations and collective bargaining, which are the principal interests of the Chicago Lithographers Association with which he assumed his new duties as executive director on Feb. 1.

"I have known my predecessor, Mr. Mattson, a long time," said Mr. Macready when asked about his plans. "We think alike and I expect to follow the same general pattern of activities he has developed in the past several years for the benefit of Chicago lithographers."

Announcement of Mr. Macready's appointment was made simultaneously with the further official announcement



Arch Macready

that the Chicago Lithographers Association and the Graphic Arts Association of Illinois have merged their activities and membership.

Under terms of the agreement, ratified by the board of each organization, all members of CLA now are members of the GAAI and of Printing Industry of America. The Lithographers Association, with 62 member firms, will retain its own identity as the collective bargaining agency for Chicago lithographers and will have its own officers and board of directors. Offices will continue to be maintained in the Graphic Arts

Building, 860 N. Wabash Ave., headquarters of the Graphic Arts Association.

Both William H. Sleepack, Jr., president of CLA, and John H. Goessele, president of GAAI, commented on the certainty that lithographers will profit from the merger, through membership in the powerful, statewide organization of Illinois printers and in the larger national PIA.

Mr. Sleepack of Sleepack-Helman Printing Co., and immediate past president of GAAI, was elected president of the Chicago Lithographers Association at the annual business meeting in January. Other officers of CLA are: vice president, George F. McKiernan of George F. McKiernan Co.; secretary, Robert J. Zillmer, I. S. Berlin Press; and treasurer, Charles Roeder, Roeder Studios.

Directors of CLA are William Y. Baker, Baker Reproduction Co.; Ernest G. Karge, Steelograph, Inc.; Howard J. Keller, D. F. Keller Co.; William S. Moore, Newman-Rudolph Lithographing Co.; LeRoy Solberg, Regensteiner Corp.; James A. Armistage, Inland Press; Oran I. Brown, Rand McNally & Co.; Vernon K. Evans, Veritone Co.; C. I. Harrison, Chicago Planograph Corp.; and Kevil H. Mason, Columbian Lithograph Co. ★

### Offers Sales Courses

The Folding Paper Box Association will offer 11 new sales training courses, it was announced recently by executive director Gustav L. Nordstrom. He said that the six "pilot" courses held last fall were so successful that the program is being expanded this year. The courses, designed to provide salesmen of member firms of the Folding Paper Box Association with instruction on modern selling techniques, are part of the Association's expanded public relations program.

Two types of courses will be offered, Mr. Nordstrom said. First an "institute" course, concentrated five-day sessions, to be given in four

centers, New York, Chicago, Dallas and on the Pacific Coast; and weekly courses, one night a week, for 12 weeks in seven major cities: Boston, New York, Baltimore, Philadelphia, St. Louis, Chicago and Minneapolis.

### Code Forces Name Change

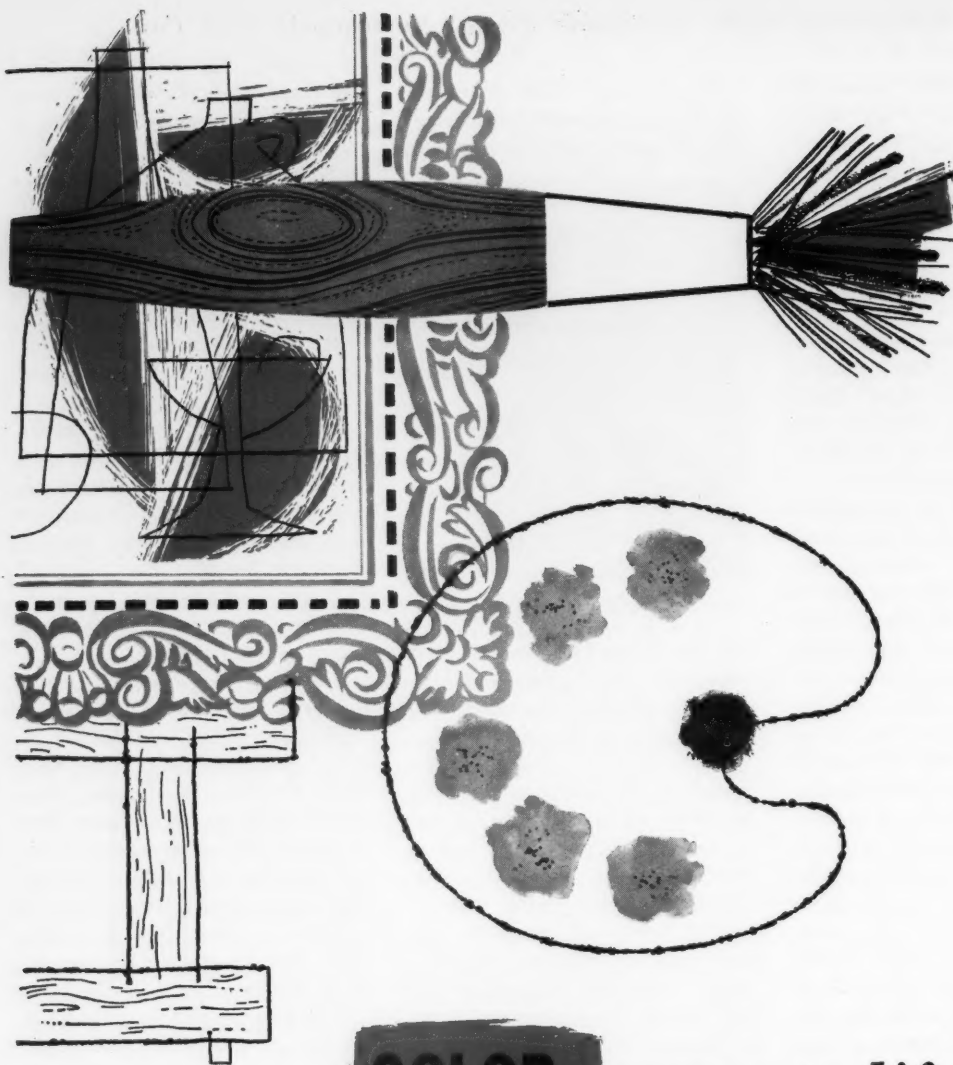
*Cooperative Press, 912 Sixth St., N.W., Washington, D. C., changed its name last month to Corporate Press, Inc. According to Frank B. French, the change in name of the offset firm was necessitated due to a D. C. Code governing the use of the word "cooperative."*

### Weeks In New Dennison Post

Dennison Manufacturing Co., Framingham, Mass., recently appointed Howard C. Weeks as assistant general merchandising manager. He has been with Dennison for 28 years, previously serving as purchasing agent.

### Eastern Meeting Planned

William Barnes O'Connor, executive secretary of the Graphic Arts Association of Baltimore, announced that the Eastern Seaboard Conference spring meeting will be held May 2-4 at the Cavalier Hotel, Virginia Beach. This year's meeting is being patterned after the 1955 meeting which proved highly informational and educational.



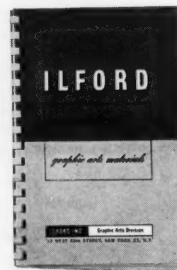
## **COLOR** comes to life

with **ILFORD** separation negatives

True color fidelity in the reproduction of originals can always be more of a certainty when you use Ilford plates for making color separation negatives. Behind every Ilford plate and film lies flawless craftsmanship perfected over many decades.

No matter what the photomechanical process, the critical step of color separation will be easier, surer of success, when you choose from Ilford's *complete line* of plates and films for the graphic arts.

For your complimentary copy of the new 44-page Ilford Graphic Arts Catalog write today on your company letterhead.



**ILFORD INC.** 37 West 65th Street, New York 23, New York  
IN CANADA: W. E. BOOTH CO. LTD., 12 MERCER ST., TORONTO 2B.

### LNPA Elects New Officers

The Lithographic Negative and Platemakers Association of Southern California recently installed new of-



ficers. They are Herbert Tobman, Colortone, president; Alex Duncan, Mission Engraving, vice president; Charles Benson, Action Lithograph Co., secretary; and Chester Richards, Color Art Studios, treasurer.

Past president Frank Harman, of Frank Harman and Associates, turned over the Association's gavel to Mr. Tobman for the 1957 term. The LNPA is a group of lithographic trade shop owners organized for discussions of technical information.

### Brown Presides At Metal Mtg.

Donaldson Brown, secretary of the Donaldson Art Sign Co., Covington, Ky., and president of the Advertising Metal Sign Manufacturers Association, presided at a one-day association meeting Feb. 28 in the Netherland Hilton Hotel, Cincinnati. Mr. Brown and Harold Jensen, director of lithography, Heekin Can Co., Cincinnati, attended a meeting of directors of the National Metal Decorators Association on Feb. 17 in Chicago.

### Union In Label Protest

Oakland, Cal., Typographical Union No. 36 has issued a public letter of protest against issuance of a so-called "offset printing label" by the secretary of Oakland Printing Pressmen & Assistants Union No. 125.

The letter, addressed to members of the pressmen's union and published in the typographical union's bulletin, charges that the label has been issued to and used by some shops whose conditions of employment do not meet the standards of

either of these unions. Although no reference is made to it in the protest, the reference is apparently to shops which have joined the Oakland Offset Reproduction Artisans Union No. 473, established in 1955 as a subordinate of International Printing Pressmen & Assistants Union under the leadership of Fred Brooks, secretary of the Oakland pressmen's union.

### Institute Offers New Service

The Chicago Lithographic Institute has announced a unique new service, assigned to help salesmen for paper, ink and other supply houses gain a better understanding of lithography and how to adapt their products to its requirements.

Explaining how the plan operates, Frank F. Oehme, manager of the Institute, said salesmen from supply firms attend classes at the Institute three days a week for six weeks, time for the course being arranged to best suit the convenience of the men taking it. Under Institute staff instructors and using Institute equipment, they follow an intensive course which provides a sound background in the principles and techniques of lithography.

First to take advantage of this new service was Consolidated Water Power & Paper Co., of Wisconsin Rapids, Wis., whose enamel paper stocks are familiar to the trade. Five men from Consolidated's sales staff were selected to take the initial class work and results convinced the company that the knowledge gained was of immeasurable value as a sales tool. Arrangements accordingly were made for another 10 salesmen to start a second course beginning March 13. Negotiations are under way for serving other suppliers in a similar way, Mr. Oehme said.

Regular spring semester courses started at the school's new quarters, 1611 W. Adams St., the week of Feb. 11 with an enrollment of around 250, Mr. Oehme reports. Preceding the opening, staff instructors held their annual dinner and social get-together with members of the Institute's board of directors and representatives of the trade press as guests.

### Rossotti Stresses Packaging

Charles C. Rossotti, Rossotti Lithographing Corp., North Bergen, N. J., recently spoke to members of the



National Macaroni Manufacturers Association during their Winter Workshop meeting at Miami Beach, Fla. Mr. Rossotti stressed the importance of the package as a selling tool, and urged the macaroni men to adopt color pictorials and recipes to make their packages more appealing.

He cited various examples of other food products such as tea, rice, frozen foods and beer, and told how new package designs had increased their sales. Mr. Rossotti also stressed the importance of a periodic re-appraisal of package designs in order to make sure that packaging is keeping in trend with the times.

### New Canco Post For May

William F. May, former supervisor of the enameling and decorating division in New York for American Can Co., has been appointed manager of manufacture of the firm's central division, with headquarters in Chicago. Mr. May, whose most recent post was manager of the non-food container division, has been with the company since 1938.

### Bovermann New 3M Sales Mgr.

The appointment of Ernest F. Bovermann to the position of general sales manager, duplicating products division, was announced recently by Minnesota Mining & Manufacturing Co. Mr. Bovermann joined 3M in 1949 as a printing products salesman and joined the duplicating products division in 1952.



WHERE YOU CAN BUY

# Warren's FotoPlates

**ALBUQUERQUE, NEW MEXICO**  
Jones Graphic Products Co.

**ATLANTA, GEORGIA**  
M & F Supply Company, Inc.

**BALTIMORE, MARYLAND**  
Bowden Graphic Arts Supply Co.  
George R. Keller, Inc.

**BOSTON, MASSACHUSETTS**  
Bridgeport Engravers Supply Co., Inc.  
Pitman Sales Co. of New England, Inc.

**BUFFALO, NEW YORK**  
Buffalo Graphic Arts Supply, Inc.

**CHARLOTTE, NORTH CAROLINA**  
George R. Keller, Inc.

**CHICAGO, ILLINOIS**  
Bridgeport Engravers Supply Co., Inc.  
Chicago Litho Products Company  
Harold M. Pitman Company  
K. Schlanger Company

**CINCINNATI, OHIO**  
McKinley Litho Supply Company, Inc.

**CLEVELAND, OHIO**  
Bridgeport Engravers Supply Co., Inc.  
Harold M. Pitman Company

**DALLAS, TEXAS**  
Lew Wenzel & Co. of North Texas

**DAYTON, OHIO**  
Salem Camera Company

**DETROIT, MICHIGAN**  
Garrick Photo Supply Company  
Lithomaster Company

**HOUSTON, TEXAS**  
Lew Wenzel & Co. of South Texas

**KANSAS CITY, MISSOURI**  
Wenzel Equipment Company

**LOS ANGELES, CALIFORNIA**  
The California Ink Company, Inc.

**MADISON, WISCONSIN**  
Widen Offset Supply Company

**MILWAUKEE, WISCONSIN**  
Reimers Photo Materials Company

**MINNEAPOLIS, MINNESOTA**  
Litho Supply Depot, Inc.  
T. K. Gray, Inc.

**NASHVILLE, TENNESSEE**  
Southeastern Printing Ink, Inc.

**NEW YORK, NEW YORK**  
Bridgeport Engravers Supply Co., Inc.  
Harold M. Pitman Company

**PHILADELPHIA, PENNSYLVANIA**  
Penn Dell and Company

**PITTSBURGH, PENNSYLVANIA**  
C. B. Collins Supply Company

**PORTLAND, OREGON**  
The California Ink Company, Inc.

**ST. LOUIS, MISSOURI**  
McKinley Litho Supply Company, Inc.  
Rissmann Graphic Arts Supply Co.

**SAN FRANCISCO, CALIFORNIA**  
The California Ink Company, Inc.

**SEATTLE, WASHINGTON**  
The California Ink Company, Inc.

**SECAUCUS, NEW JERSEY**  
Harold M. Pitman Company

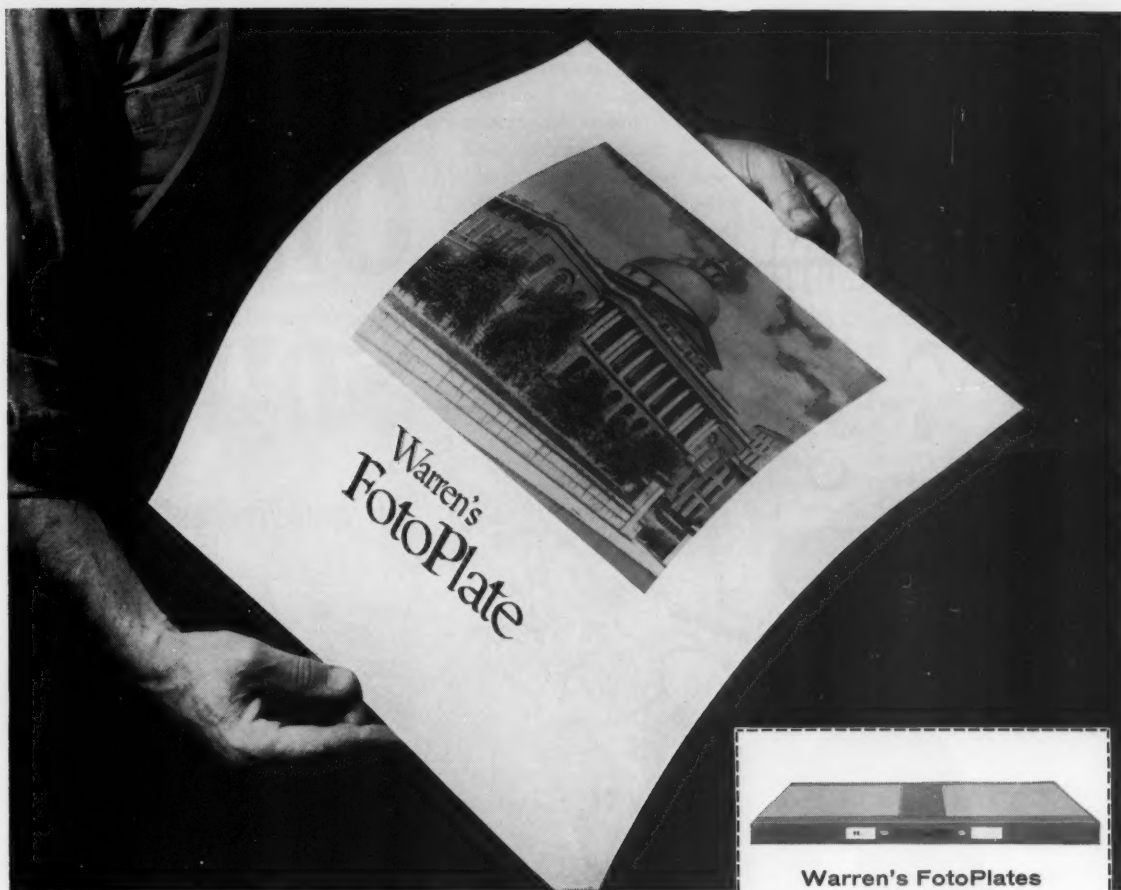
**TOLEDO, OHIO**  
Toledo Lithograin and Plate Co.

**TULSA, OKLAHOMA**  
Lew Wenzel & Co. of Oklahoma

**UTICA, NEW YORK**  
Buffalo Graphic Arts Supply, Inc.

**WASHINGTON, D. C.**  
George R. Keller, Inc.





# Warren's FotoPlate

(PRESENSITIZED LITHOGRAPHIC PLATE)

## GIVES YOU A TRIPLE ADVANTAGE

1. *It delivers the finest reproductions of halftones.*
2. *Does this with economy.*
3. *And does this with speed and ease.*

**Warren's FotoPlate** possesses excellent dimensional stability. Lithographers like *FotoPlate* because no special technique is required. With *FotoPlate*, more good plates can be made and on press in a working day.

Investigate the advantages of *FotoPlate* for yourself. Get further details and special instruction booklet from any FotoPlate distributor, or communicate with the manufacturer's headquarters: **S. D. Warren Company, 89 Broad Street, Boston 1, Massachusetts.**



**Warren's FotoPlates**  
are available  
in the following sizes

Twenty-five plates to a package.  
Four packages (100 plates) to a carton.

10	x 16	27 1/4	x 28 5/8
17 1/2	x 16	27 1/4	x 30
15 1/2	x 20 1/2	26 3/4	x 31
20	x 22 3/4	25 1/2	x 36
19 3/4	x 23	26 3/4	x 36
19 7/8	x 24 5/8	19 1/2	x 36
22 1/2	x 30	30 1/4	x 35
24 5/8	x 30	32	x 41
32 1/2 x 43			





# One Source

for your Pre-Sensitized Plates

# Pitman

Whether you were a pioneer with  
Pre-Sensitized Plates, or are just now  
discovering their proven economy and ease...

Pitman is your best source  
for all sizes...for every press.

Pre-Sensitized Plates from  
leading manufacturers — Enco, FotoPlate,  
Harris, 3M — plus all necessary  
chemicals are always in stock. Call or write  
the Pitman office nearest you for  
prompt delivery.

**HAROLD M. PITMAN CO.**

*Chicago 50, Illinois—33rd Street & 51st Avenue  
Secaucus, New Jersey—515 Secaucus Road  
Cleveland 11, Ohio—3501 W. 140th Street  
New York 36, New York—230 West 41st Street  
Boston 10, Massachusetts—266 Summer Street  
—Pitman Sales Co.*

### Mexican Lithographers Tour U.S.

Representatives of the Mexican lithographic industry recently visited Mergenthaler Linotype Co., Brooklyn and Consolidated Lithographing Corp., Carle Place, L. I., under the auspices of the International Cooperation Association. The Mexican lithographers, during their tour of major lithographic centers in the U.S., visited equipment manufacturers, research organizations, trade associations and labor organizations,



Representatives of the Mexican lithographic industry visited Mergenthaler Linotype Co. and its subsidiary, Davidson Corp., in Brooklyn recently. Here the visitors see a demonstration of the Davidson Dual-Lith Model 251 press. From

as well as lithographic companies.

The group attended an industry meeting in New York which included Wade E. Griswold, executive director of the Lithographic Technical Foundation; Edward Blank, chairman of the Lithographic Group of the New York Employing Printers Association, Inc.; Matthew A. Kelly, director of industrial relations for NYEPA; and W. Floyd Maxwell, executive director of the Lithographers National Association.

the left are Theodore Markow, representative of the International Cooperation Association; Carlos Portillo, Fernando Aranguren, William Moran, of Davidson Corp.; Eduardo Torres, Benito Zamura, and Luciano Lopez.

### Alumni Publication By Offset

The *Illinois Alumni News*, published by the University of Illinois Alumni Association, is receiving high praise for its improved appearance since production was shifted from letterpress to offset. Explaining the reason for the change, James Colvin, editor of the *News*, said that during the former letterpress days "one issue would look fairly clear and the next one would be such that you couldn't even identify the people in the pictures." He blamed the trouble on the press used then, which, he said, "was old and impossible to keep in good running order."

Under the new arrangement, type is set and pages made up in Urbana, then reproduction proofs are drawn and sent to the John Swift Co., in Chicago, which takes over from there. Cost for lithographing the monthly editions of some 70,000 copies has

more than tripled, Mr. Colvin said. However, considering the hundreds of letters from alumni around the world expressing approval of the improved appearance of the publication, he said association officers feel that the higher production expense is fully justified.

### Production Conference Held

Martin Bassist, Ace Offset Printing Co., Los Angeles, and Harry Griffin, Griffin-Patterson, were the two main speakers at the 2nd annual Production Management Conference in San Bernardino. Scott Mattraw of Hillside Press was chairman for the conference, sponsored by Printing Industries Association, Inc. of Los Angeles.

Mr. Bassist related a case history dealing with the effect of successful production management on the profit of his company. Mr. Griffin discussed qualities production men must possess and their responsibilities of such posts.

### AIGA Clinic On Layout

The Magazine Clinic of the American Institute of Graphic Arts will present six art directors doing spontaneous layouts at its March 27 meeting at Willkie Memorial Building of Freedom House, New York. Each art director will receive duplicate materials and then furnish original layouts.

### Berlin Press Featured

The I. S. Berlin Press, Chicago, held the spotlight at the February meeting of the Chicago Craftsmen's Club. Shown on the annual "Offset Night" program was a movie in color relating "The Berlin Success Story." I. S. Berlin, president and Paul Schmidt, plant superintendent, were narrators and discussed the extensive offset operations of their company. The film originally had been produced for showing when Mr. Berlin was interviewed, some time ago, on a Chicago TV station. Later it was revised and expanded to a 35 minute film.

### MLA Lists Guests Speakers

The Metropolitan Lithographers Association, New York, has scheduled Edward Swayduck, president of Local 1, ALA, and Benjamin M. Robinson, attorney for ALA, International, as guest speakers at its dinner meeting March 20 at Hotel Shelburne.

Lithographic employers in the area will have an opportunity to learn some of the background and recent developments of the jurisdictional feud between graphic arts unions for control over certain lithographic operations. Mr. Robinson represented the ALA in its recent Seattle dispute (See *ML*, Feb., page 81) where the union won the jurisdictional fight with the International Typographical Union.

Also covered by the speakers will be the subject of where Local 1 stands on the labor front in lithographic manpower, equipment and expansion. Mr. Swayduck will speak on the operation of the program of combination of job classifications in the preparatory departments and on the status and projected plans of the ALA Pension Fund.

# ANNOUNCING

to members of the

## National Association of Photo-Lithographers

---

### A GROUP LIFE INSURANCE PLAN

---

designed specifically and exclusively for  
NAPL MEMBERS AND THEIR EMPLOYEES

Note carefully these special benefits of paramount importance to you.

1. The NAPL Group Insurance plan has been approved by the Insurance Committee and Executive Committee.
2. The provisions and benefits are those which in the opinion of the Insurance Committee are best suited to the typical association.
3. It is expected that in future years these "basic benefits" will increase and expand to provide greater and additional benefits. By this method, the eventual plan will be "tailor made" for our Association.
4. Skilled Trustees, expert counsel and other practical benefits are provided. All of these are important in the establishment and maintenance of a sound and complete program for the Association's executives and employees.

1. Available without medical examination.
2. Available to members of National Association of Photo-Lithographers and their employees without regard to size of organization.
3. Schedule of Insurance:

<i>Classification</i>	<i>Life Insurance</i>
a. Officers, Partners, Owners and General Managers . . .	\$5,000
b. Supervisory Employees, Salesmen, Estimators and Accountants . . . . .	3,000
c. All other full-time employees and all employees age 65 and over . . . . .	1,000

**Note:** Upon attainment of age 65, the amounts of insurance will be reduced to \$1,000.

*Booklets and subscription cards are now being distributed. For information write to:*

## NATIONAL ASSOCIATION OF PHOTO-LITHOGRAPHERS

317 West 45th Street

New York 36, N. Y.

## *John Hancock*

MUTUAL LIFE INSURANCE COMPANY

BOSTON, MASSACHUSETTS



### LNA Contest Lists 2,496 Entries

A record total of 2,496 specimens of offset-lithography have been entered in the 7th Lithographic Awards Competition & Exhibit, sponsored by the Lithographers National Association.

The total number of entries received from all sources in the U.S. and Canada represents an increase of 526 specimens over the previous year, it was announced by Edward J. Chali-foux, president, Photopress, Inc., chairman of the LNA Promotion Committee.

Lithographic plants, including 206 Association and non-member outfits, accounted for 1,717 entries, an increase of 359 over those submitted in 1956. By far the heaviest increase in the receipt of entries came from advertisers, agencies and other buyers and users of lithography, who were responsible for a total of 779 entries, as against 612 in the 1956 Competition. The number of buyers participating rose from 234 last year to 253 this year.

The 270 winning pieces will be announced in April and displayed at LNA's 52nd Annual Convention, April 1-3, at The Greenbrier, White Sulphur Springs, W. Va. Exhibitions in Chicago and New York City are being scheduled for later in April and May and the traveling itinerary is being developed through LNA's Chicago office, 127 N. Dearborn St., where arrangements can be made for showings in local communities.

### Charters Granted To Four Firms

Charters of incorporation have been granted to four New York lithographing companies. They are Duo Litho Corp.; Associated Offset Co., Inc.; Tyme Lithograph Corp.; and Parliament Lithographic Corp.

### Photocomposition To Be Topic

The Pacific Coast Typesetting Association will hold its second annual convention at San Francisco's Sheraton-Palace Hotel March 14-16. Photocomposition equipment and techniques will be the main subject under discussion during two full days of meetings, and the San Francisco

Typographical Union will conduct a tour of its recently established "new processes" school. Business aspects of the typesetting industry and the relationship between the Pacific Coast organization and the International Typographic Composition Association also will be discussed.

### Litho Green Book Off Press



Seymour Udell, left, Ampco Printing Co., Inc., New York, chairman of New York Employing Printers Association's Cost Committee, and Julius Briskie of Pace Press, Inc., chairman of the NYEPA Production Committee, inspect first copies of the revised new editions of the Association's lithographic and letterpress Green Books. The lithographer's Green Book lists hourly cost rates and production standards for lithographic operations.

### Ideal Branch Officer Retires

Herman F. Ewell, Ideal Roller & Manufacturing Co., Chicago, recently retired as manager of the Milwaukee office. Mr. Ewell is best known in the Minnesota and Wisconsin area, having spent nearly all his 25 years of employment with Ideal in that territory.

Mr. Ewell, the fourth Ideal employee to benefit from the firm's retirement pension plan, began his career with Ideal when the roller division of International Printing Ink Co. was merged with Ideal. He has been succeeded as Milwaukee manager by Albert W. Bergmann.

### Bart W. Lang Dies Suddenly

Bart W. Lang, 60, president of St. Louis Lithographing Co., died Jan. 28 of a heart attack while in Jersey City on business. Mr. Lang had been associated with the company for 25 years and was president for one year.

### Miehle-Goss-Dexter Merger Final

The merger of Miehle Printing Press & Mfg. Co. and the Goss Printing Press Co. became effective Jan. 31 with the filing of papers in the offices of the secretaries of state of Delaware and Illinois. The newly established corporation, Miehle-Goss-Dexter, Inc., has 3,000 shareowners, 4,000 employes, plants in six U.S. and several foreign cities and sales and service facilities throughout the world. Headquarters of M-G-D are in Chicago where Goss was founded in 1885 and Miehle in 1890. Dexter Folder Co. was merged with Miehle in Sept., 1956.

### IPI Names New Managers

W. F. Cornell, division president, Interchemical Corporation, IPI, has announced new assignments involving three of the four IPI districts. John T. Hargrave, formerly New York branch manager, succeeds William N. Davies, Sr., as eastern district manager. Mr. Davies recently became the new president of Interchemical's Textile Colors Division. C. Stanley Johnson, recently manager of IPI's central district, will be manager of the newly enlarged southern district. William S. Law, manager of IPI's Cambridge, Mass., branch for the past eight years, becomes the new central district manager.

### Shanin Plans New Plant

The Shanin Co., Chicago printer and lithographer, announced plans recently for the erection of a new printing plant and office building at Lincoln Ave. and Arthur St. The new plant will contain 30,000 sq. ft. of floor area and will have new printing and lithographic facilities.

### Bekassy in Phila. for Lawson

Alexander F. Bekassy, of the E. P. Lawson Co., has been assigned to the firm's eastern sales staff. According to Lester M. Reiss, vice president and eastern sales manager, Mr. Bekassy will make his headquarters at the firm's Philadelphia office in the Bourse Building. He will cover Virginia, Washington, D. C., Maryland, Delaware and part of Pennsylvania, including sections of Philadelphia.



## Newest Howard contribution to The Art of Business Printing Design

Again, a completely new approach to modern business printing design—and a notable addition to former HOWARD bonds and portfolios that have earned so much interest and esteem.

In "BOND TOWN, U.S.A." a series of gate-fold pages sample letterhead and business printing designs in great profusion.

A request on your letterhead will bring you a copy promptly.

HOWARD PAPER MILLS, INC., HOWARD PAPER COMPANY DIVISION, URBANA, OHIO

*the nation's*  *Business paper*

# Howard Bond

COMPANION LINES: HOWARD LEDGER • HOWARD MIMEOGRAPH • HOWARD WRITING • HOWARD POSTING LEDGER

ILLUSTRATION

## First Commercial Model of Monophoto Installed

**W**ESTCOTT & THOMSON, Philadelphia, will be the first plant in the U. S. to have the commercial model of the Monophoto installed. According to Lanston Monotype Co., developers of the Monophoto, a phototypesetting machine, the second installation will be in the Philadelphia printing plant of E. I. Dupont de Nemours Co.

The Monophoto incorporates basic mechanical principles embodied in its counterpart, the Monotype Composition Caster, and is controlled by a paper tape perforated on the keyboard. Composition is by individual characters based on a unit system of values. Maximum line width is 60 picas, which can be composed in separate columns of lesser widths. A line-killer is incorporated for keyboard errors and facilities are provided for automatic quadding and centering.

The master negative case, a solid glass negative, has 255 characters with space positions. Each character on the negative is approximately eight points in size, and the characters are arranged in unit rows identical to the principle employed with bronze matrices used for hot-metal composition. Sometime during 1957, indi-

vidual character negatives will be made available so that it will be possible to make individual character changes in the master negative case. These arrangements can be made to correspond with any standard or special layout. The same keyboard operating equipment (keybanks, keybars, stopbars) can be used to perforate separate controller paper for either phototypesetting or hot-metal composition.

According to the firm, a film drum eliminates any possibility of the surface of the film rubbing against another surface, because the film remains stationary on the drum. Movement of the gear-controlled drum positions the film from line to line and if necessary, the film can be returned to any previously set line. The film drum advances mechanically in increments of one-half point. Positive control by the drum over the film makes it possible to back the film up and reset the stop on the mirror bar. Thus columns may be placed side by side even though they were keyboarded as one column. It is also possible to set all of one size, including mixed Roman, Small Caps, Italic, and Boldface in the job, and then back up

the film to spot in the next size in its proper position. Line spacing (leading) can be decided after the keyboarding has been completed without the necessity for repeating the manual operation of keyboarding.

The film drum will accommodate a sheet of film  $11\frac{1}{8}$ " wide x 26" long to provide for composition 60 picas (10 inches) wide x 24" deep. However, any size film can be accommodated so it is only necessary to use a size needed for a specific job. Any photographic film (thin base, thick base or stripping film) can be used in the machine. Photographic paper also can be used, when it is desired to make a right reading negative from it.

The Monophoto is equipped with safety devices so that the machine stops operating if the light source fails to function and if the compressed air pressure falls below its specified limit. Since the machine is automatic in operation and can be unattended, the safety devices call attention by stopping the machine. The possibility of film being wasted through an electrical or mechanical failure is thus eliminated.

### Mead Names Two Executives

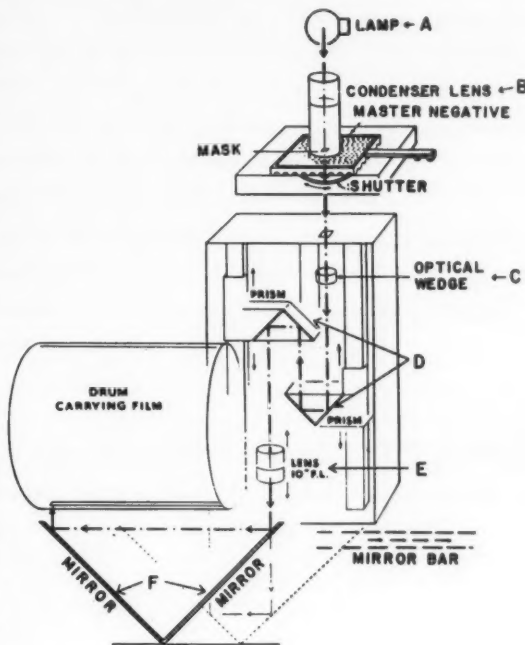
Burton C. Berg has been elected vice president of administration for Mead Papers, Inc., and Robert C. Eisenbach has been named assistant to Mr. Berg, it was announced last month. Mr. Berg has been associated with Mead for the past 20 years. Prior to joining Mead in 1951, Mr. Eisenbach was associated with Kimberly-Clark Paper Co.

### PIA Plans Sales Conference

"Brainstorming," the contagious method of producing ideas which is being used more and more by industry and many advertising agencies, will be the featured attraction at the fourth annual Printing Sales Conference of Printing Industry of America, March 21-22 at Edgewater Beach Hotel, Chicago.

Members attending the two-day conference will be given details on every phase of selling. Four sessions are planned in addition to a sales seminar.

The optical system consists of (a) a pre-focused light bulb which operates from a voltage-regulated source; (b) a condenser lens which concentrates the light output to give intense illumination over the area of the character on the master negative; (this area is a .2-inch square); (c) an optical wedge which adjusts the path of light so that, regardless of the degree of enlargement or reduction of the character, the left-hand margin will fall at the same point; (d) two prisms which bend the light, thus permitting the optical system to occupy less space in the machine; (e) a single lens, (10" focal length); (f) two 45 degree flat-surface mirrors which reflect the image on the film.



# chemco POWERLITH Film

if it's chemco  
it's best  
for platemaking

*what's in it for you?*

The answer is — plenty! Chemco research has recently achieved a lithographic film advancement that is winning orders and re-orders from Photo Lithographers.

Powerlith film now gives its users maximum latitude in line work, without sacrifice of halftone quality. By this we mean, considerable variation in line exposure is possible without loss in density, or filling-in of fine lines.

Powerlith is available in a broad range of sheet sizes to meet every conceivable offset photographic requirement. But have you considered the economy of using roll film?

(If you make more than forty negatives a day, Powerlith film in rolls, together with a Chemco Model F-1212 Roll Film Offset Camera will make money for you in your gallery.)

Contact your local Chemco representative for details and samples of this new Powerlith Film.



**chemco PHOTOPRODUCTS COMPANY, INC. GLEN COVE, N. Y.**

ATLANTA BOSTON CHICAGO DALLAS DETROIT NEW ORLEANS NEW YORK



## **Canners Association Reports Record Year**

LABEL PRINTERS in 1956 were called on by the nation's food canning industry to provide some 22½ billion labels for the cans and jars in which last year's all time record pack of 681 million cases were sent to market.

This figure was made public during the National Canners Association's Golden Anniversary convention in Chicago, Feb. 16-19. Looking back to its beginning, 50 years ago, the Association reported that in 1907 the pack had been 40 million cases or 960 million containers for only 30 items.

Last year labels were used on more than 600 different kinds of canned foods, basically classed as vegetables, fruits and fruit juices, milk, meat, seafoods, soups, infant foods, preserves, marmalades, jams, jellies, condiments and numerous specialties and combinations.

Further breaking the figures down, the NCA said that among the main categories, seasonal vegetables were packed in 5.6 billion containers; fruits in 2.5 billion containers; specialties in 4.6 billion; milk, 3 billion; fish, 1.5 billion; canned poultry and meat, 1.8 billion. And all had to be finished off with labels.

Judging from figures of the canning industry's past steady growth, label lithographers can look forward with assurance that the future holds promise of still greater demand for their services on the new items that are certain to come. Here are some figures on new products developed over just the past ten years:

Concentrated orange juice increased from ½ million gallons in 1946 to 70 million in 1956. Apple sauce, apple juice and sliced apples increased from 10 million cases to 20 million over the 10-year period. Pie fillings, practically unknown in 1946, are now a volume item. In 1946 one large baby food manufacturer had 37 varieties of baby foods in his line. Today he makes 77 products for babies. In 1946 only 61 vegetables were canned. Today they number 133.

One soup maker lately has added 16 ready-to-serve hot soups and eight varieties of frozen soups to his line. And during the decade a wide assortment of dietetic fruits and vegetables has appeared with attendant demand for more labels.

The Association review notes, also, that glass containers are lighter and tougher; cans and closures are easier to remove; metal cans are stronger and have better linings.

Salesmen and designers in litho plants specializing in labels will do well to keep an eye on the possible outgrowth of one suggested seed thought thrown out during the convention. Speaking during a "Looking Ahead" conference a canning company executive asked "Can't we canners do a better job of descriptive labeling, by really giving information that is of service? Can't we be of real service by giving worth while instructions and recipes, instead of using back panels to plug our products and show pictures of our plants? Shouldn't we change the recipe often to give the consumer many ideas during the year?"

Label lithographers in past years have usually occupied booths in the big exposition hall at the Conrad Hilton Hotel, where convention activities are centered. In more recent years, however, they have tended to set up their displays in other hotels where larger space and greater privacy for themselves was available. This year many lithographers were scattered through most downtown hotels and some farther out. From the convention directory this list of those officially participating in the convention is culled: Armstrong Cork Co., Lancaster, Pa.; Calvert Lithographing Co., Detroit; Container Corp. of America, Chicago; Muirson Label Co., San Jose, Calif.; Rossotti Lithograph Co., North Bergen, N. J.; Stecher-Traung Lithograph Corp., Rochester; and U. S. Printing & Lithographing Co., Cincinnati. Other litho firms also were present but not listed in the membership directory.

Seven companies doing metal decorating found space in the Hilton exposition hall and five others were located in other hotels. Included were Aluminum Co. of America, Pittsburgh; American Can Co., New York; Anchor Cap & Closure Corp. of Canada, Toronto; Casper Tin Plate Co., Chicago; J. L. Clark Mfg. Co., Rockford, Ill.; Continental Can Co., New York; Crown Cork & Seal Co., Baltimore, Md.; Heekin Can Co., Cincinnati; O., National Can Co., Chicago; Olive Can Co., Chicago; and White Cap Co., Chicago.★

### **Anniversary For Behl Printing**

Behl Printing Co., New York, celebrated its 35th anniversary last month with a party at Hotel Statler. The letterpress and offset company, now operating at 145 Hudson St., produces snap sets and various business forms. Albert A. Behl founded the firm in 1922. His current partners are his son, Malcolm Behl and Abraham J. Alexander.

### **Houston GAA Visits Bell**

Houston Graphic Arts Association members, their wives and guests were dinner guests of the Southwestern Bell Telephone Co., Feb. 11. After the dinner and a short business session, a tour of the long distance dialing facilities of SW Bell was made by those in attendance.

During the business session a Code of Ethics for the printing industry of Houston was reviewed and adopted.

HGAA president Jarold Joseph and executive secretary O. K. Eden were among the representatives of the Houston Graphic Arts Industry attending the State Board of Control meeting in Austin Feb. 7. Purpose of the meeting was to work with the board on proposed revisions in their procedures affecting procurement of printed matter.

Others from Houston attending the meeting were Stephen Bresk, the Rein Company; Ned Gill, Ned Gill Company; and Mrs. G. R. Smudski, Superior Typesetting Company.

The association held open house Jan. 30 at its new location, 802 Chelsea Blvd.

*They* **SPEAK  
for THEMSELVES**



**I am AQUATEX**

A specially treated looped-textured fabric with a smooth even surface (*no seams*) allowing an even distribution of fountain solution over the entire surface of the dampening roller. My tailor-made feature (*a size for every press*) and two way stretch action insure a glove-like fit preventing wrinkles or twists eliminating dry areas or fill-ins.

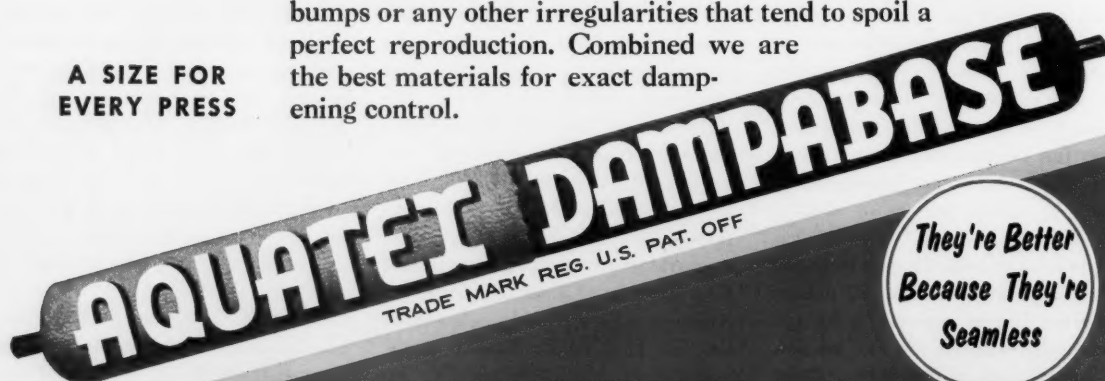
Don't let my smooth soft texture fool you, for I am tough . . . tough enough to take the long hard wear of high speed equipment.



**I am DAMPABASE**

Like my team-mate Aquatex I am a specially treated loop fabric with springy texture that prevents matting and allows just the right cushion to be the perfect reservoir. I retain and feed an even flow of moisture to Aquatex, the outer covering. We . . . Aquatex and Dampabase are free of seams, wrinkles, bumps or any other irregularities that tend to spoil a perfect reproduction. Combined we are the best materials for exact dampening control.

**A SIZE FOR  
EVERY PRESS**



*They're Better  
Because They're  
Seamless*

**GODFREY ROLLER CO.**

*Roller Makers for 92 Years*

211-21 NORTH CAMAC STREET

PHILADELPHIA 7, PA.

### Alexander New Sun President

Sun Chemical Corp., Long Island City, N. Y., has elected Norman E. Alexander as president and director of the company, it was announced last month by the firm's board of directors. Mr. Alexander succeeds Ralph C. Persons who recently retired. Mr. Alexander is also president and director of the Ansbacher-Siegle Corp. of New York.

At the same time, the board of directors elected five new members. They are Ralph Stillman, president of Grace National Bank; Howard Vultee, administrative vice president of Marine Midland Bank and Trust Co.; William Steinschneider, president of Lotte Chemical Co. and former vice president of the Heyden Chemical Co.; and Joseph E. Harris, chairman of the Northern Pacific Television Corp., chairman of the Northern Pacific Radio Corp. and president of Flamingo Films.

### Direct Mail Day Speaker

Arthur E. Burdge, president of the Direct Mail Advertising Association, was scheduled to address a joint luncheon meeting of the Detroit Aircraft Club and participants in Direct Mail Day in Detroit, March 1. "Mail, Males and Merchandising" was to be his topic for discussion.

### Merrill A. Reed Dies

Merrill A. Reed, 76, founder of Merrill Reed Lithographers, San Francisco, died in Burlingame, Cal., Feb. 10, following a short illness.

A graduate in law and marine architecture, Mr. Reed was associated with newspaper representatives and advertising firms in Portland, Los Angeles, and San Francisco prior to establishing his lithography plant in 1936. During World War I, he operated his own shipyards in Portland, making life boats for the War Shipping Administration.

A veteran of the Philippine Insurrection and Boxer Rebellion, Mr. Reed was a life member of the National Society of the Army of the Philippines.

Merrill Reed Lithographers continues under the management of Mr.

Reed's step-son, Horace A. Miller, who has been general manager since Mr. Reed retired from active participation in 1955.

### Cline Names Division Head

Cline Electric Manufacturing Co., Chicago, recently announced the appointment of Find Sandgren as general manager of the company's Graphic Arts Products Division. Until recently, Mr. Sandgren was assistant general manager of this division.

Other appointments in the division include Leroy P. Palmer, new works manager; Ronald F. Spiller, production manager; and William F. Butor, purchasing agent.

### Bruno Is Guest Speaker

Michael H. Bruno, research manager of the Lithographic Technical Foundation, was guest speaker Feb. 21 at a dinner meeting of the Printing Industries Association of Western New York at Hotel Lennox, Buffalo. Mr. Bruno's topic was "Why Offset?"

### Moore Plans New Plant

Moore Business Forms, Inc., Niagara Falls, N. Y., announced it will build a 40,000 sq. ft. plant in Angola, Ind., to make business forms. Construction will begin this spring and the new unit will employ more than 100 persons. Robert F. Poole has been named plant manager.

*The* **Miehle**  
**OFFSETS**

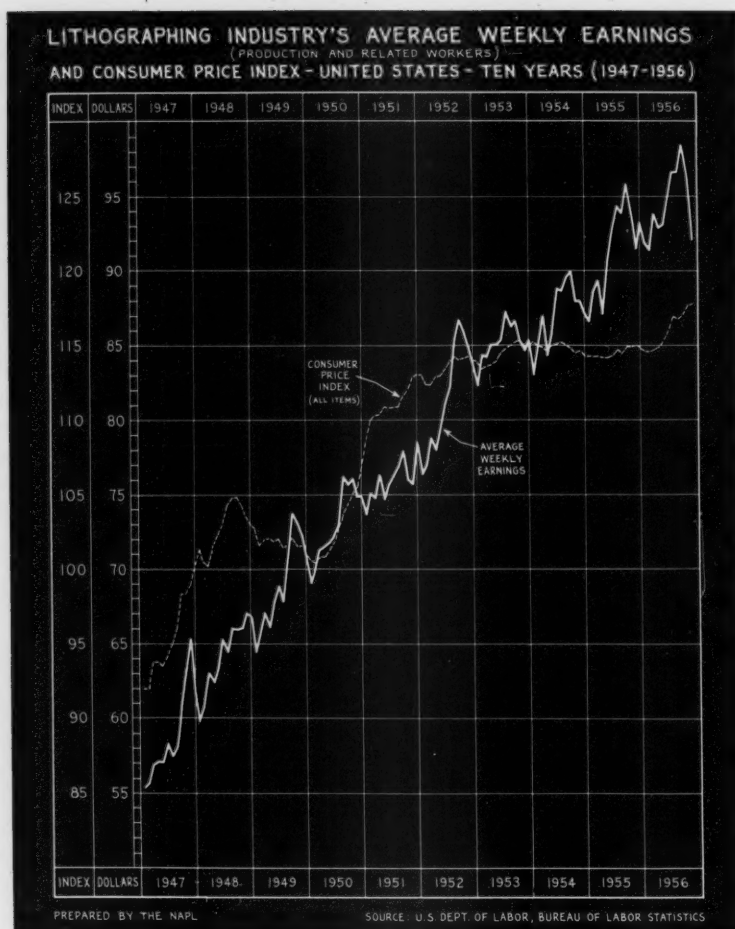


**True Rolling Cylinders  
mean Better Quality...**

All Miehle Offsets are built with the exclusive feature of True Rolling Cylinders. Developed by basic Miehle research, this feature assures a true rolling contact at the printing line, both between plate and blanket and between blanket and paper. The result ... printing the true image without dot distortion, accurate print length, longer plate life, and elimination of paper stretching forces—all of which mean superior lithographic quality on every job.

*Write for complete information*

**MIEHLE PRINTING PRESS AND MANUFACTURING CO.**  
CHICAGO 8, ILLINOIS



The productivity and sales volume of the lithographic industry is reflected by this chart showing the average weekly take home pay of industry employees. A 77.59 percent increase has taken place over a ten-year span.

#### Wage Chart Prepared by NAPL

The above chart, prepared by the National Association of Photo-Lithographers, shows the relation between average weekly earnings of production and related workers in the lithographic industry, and the consumer price index (all items) in the U.S. for the years 1947-1956 inclusive. The average weekly earnings ranged

from a 10-year low of \$55.46 in Jan., 1947, to a high of \$98.49 in Sept., 1956, a 77.59 percent increase. The consumer price index ranged from a low of 91.8 in Feb., 1947, to a high of 117.8 in Nov., 1956. (It should be noted, however, that following the high period of Sept., 1956, a decline occurred, bringing down the average to approximately \$92.)

#### Contest Inaugurated By 3M

Excellence-of-Lithography certificates and cash awards are the prizes which will be awarded to individual lithographers, platemakers and pressmen for outstanding lithography in a contest sponsored by Minnesota Mining and Manufacturing Co.

The company said the award program is designed to promote the highest standards of lithographic re-

production and to pay recognition to this important segment of the graphic arts industry.

During each quarter of 1957, ten individual awards will be made for excellence of reproduction accomplished on lithographic presses. Entries may be half-tones, solids, letterheads, forms, illustration, or other types of lithography including metal lithography done in one color, multi-

color or process. The competition is open to any entry reproduced from "3M" brand presensitized lithographic plates.

The first quarter competition began Jan. 1. All entries received after March 31 will be entered in second quarter competition.

#### Direct Mail Programs Set

The second annual meeting of the Direct Mail Agency & Counselor's Group will be held March 29-30 at Hotel Roosevelt, New York. The two-day meeting will feature a full program covering art, copy, campaign planning, advertising agency relationships, and 14 other subjects concerning the creative aspects of direct mail.

Highlighting the New York session, under the auspices of the Mail Advertising Service Association International, will be an opening luncheon talk by Lawrence G. Chait, vice president of eastern operations for R. L. Polk & Co. His theme will be "The Strategic Use of Direct Mail as Advertising."

Immediately preceding the Counselor's Group meeting, March 28, Direct Mail Day will be held by the Mail Advertising Service Association of New York City, Inc. According to the organization, 28 other associations and clubs in the graphic arts field will participate.

#### St. Louis GAA Installs Officers

Mayor Raymond R. Tucker of St. Louis was guest speaker at the 52nd annual inaugural dinner of the Graphic Arts Association of St. Louis, held recently at the Coronado Hotel.

The newly elected officers installed are Henry G. Keeler, Jr., Keeler-Morris Printing Co., president; Herbert M. Ross, Ross-Gould Printing Co., vice president; Frank J. Merrill, The Geo. D. Barnard Co., secretary; and Leonard B. Brown, A. R. Fleming Printing Co., treasurer.

A. Carl Weber, Laclede Steel Co., was toastmaster. Retiring association president, Leslie F. Wipperman, Garison-Wagner Printing Co., received a scroll of appreciation signed by association directors.



# Double Coated Offset at no extra cost!

High  
stability!

Trouble-free  
press  
performance!

Quick  
ink-setting!

Superior  
pick  
resistance!

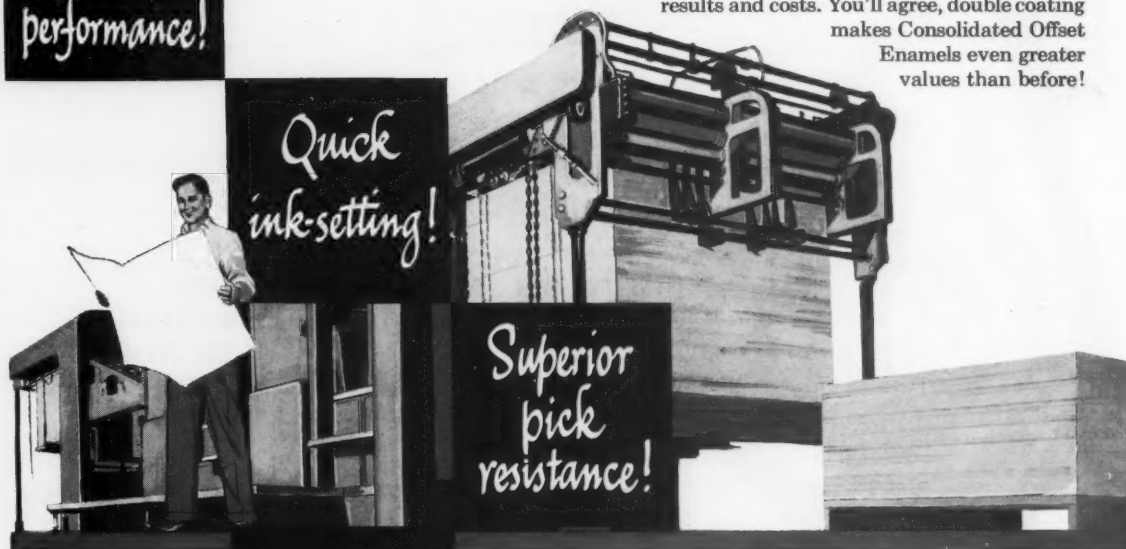
Brighter  
color!

## ANOTHER GREAT CONSOLIDATED PAPER VALUE!

Without a cent of added cost, you can enjoy the superior offset performance you get only with double coating.

You get double coating advantage in every Consolidated grade. PRODUCTOLITH, CONSOLITH GLOSS and CONSOLITH OPAQUE are double coated on both sides in a single high-speed operation—*right on the papermaking machine!* There are no extra manufacturing steps—no extra cost.

You'll find double coating magnifies all the many fine performance qualities that leading lithographers have always liked in Consolidated Offset Enamels. See the difference the next time you're running a job. Just ask your Consolidated merchant for free trial sheets to compare with the offset paper you're now using. Check performance, results and costs. You'll agree, double coating makes Consolidated Offset Enamels even greater values than before!



# Consolidated

## ENAMEL PRINTING PAPERS

a complete line for lithographic and letterpress printing

CONSOLIDATED WATER POWER AND PAPER COMPANY  
SALES OFFICES: 135 S. LA SALLE ST. • CHICAGO 3, ILL.

printers and lithographers avoid  
many an ink problem when  
they buy, not just inks, but

## INK PERFORMANCE IN USE


(a product of GBW ink technicians)

It's one thing to buy good quality inks.  
But it's *another* to buy inks that will do a good  
job of quality printing on *your* jobs, in *your*  
shop. That is why many leading printers find  
the services of GBW ink technicians invaluable.

For, as *you* will find, your GBW ink technician  
is thoroughly trained in the chemistry of  
"inks in use" and schooled in the vital part  
inks can play in improving printing quality  
and reducing printing costs.

He can help *you* deliver quality jobs quicker—  
with a saving of time and money. Why not  
send for him today—a phone call will do it.

*Traditionally fine inks  
for over a century*



**GBW**

**INKS**

LITHO  
LETTERPRESS  
DIE STAMPING  
METAL DECORATING

**GAETJENS, BERGER & WIRTH, INC.**

**Member of:**

New York Ink Makers Association  
Lithographic Technical Foundation  
Milwaukee Chamber of Commerce  
Wisconsin Ink Association  
National Association of Printing Ink Makers  
National Printing Ink Research Institute  
Chicago Printing Ink Mfrs. Association  
Illinois Chamber of Commerce

Brooklyn 1, New York  
Chicago 7, Illinois  
Milwaukee 5, Wisconsin  
Toronto, Canada  
Mexico 8 D.F.  
Salt Lake City

## Trade Events

Lithographers National Association, 52nd annual convention, April 1-3, The Greenbrier, White Sulphur Springs, W. Va.  
Southern Graphic Arts Association, annual convention, April 4-6, Battle House Hotel, Mobile, Ala.  
National Association of Litho Clubs, annual convention, May 2-4, Chicago.  
Technical Association of the Graphic Arts, 9th annual meeting, May 13-15, Philadelphia.  
National Association of Photo-Lithographers, 25th annual convention, Sept. 11-14, Chase Park-Plaza Hotel, St. Louis.  
National Metal Decorators Association, 23rd annual convention, Oct. 21-23, Chicago.

## Litho Schools

Canada—Ryerson Institute of Technology, School of Graphic Arts, 50 Gould St., Toronto, Ont., Canada.  
Chicago—Chicago Lithographic Institute, 1611 W. Adams St., Chicago 12, Ill.  
Cincinnati—Ohio Mechanics Institute, Cincinnati, Ohio.  
Los Angeles—Los Angeles Trade Technical Junior College, 1646 S. Olive St., Los Angeles 15, Calif.  
Minneapolis—Dunwoody Industrial Institute, 818 Wayzata Blvd., Minneapolis 3, Minn.  
Nashville—Southern School of Printing, 1514 South St., Nashville, Tenn.  
New York—New York Trade School, Lithographic Department, 312 East 67 St., New York, N. Y.  
Manhattan School of Printing, 72 Warren St., New York, N. Y.  
Oklahoma—Oklahoma A & M Technical School, Graphic Arts Dept., Okmulgee, Okla.  
Rochester—Rochester Institute of Technology, Dept. of Publishing & Printing, 65 Plymouth Ave., South Rochester 8, N. Y.  
Philadelphia—Murrell Dobbins Vocational School, 22nd and Lehigh, Philadelphia, Pa.  
Pittsburgh—Carnegie Institute of Technology, School of Printing Management, Pittsburgh.  
San Francisco—City College of San Francisco, Ocean and Phelan Aves., Graphic Arts Department.  
St. Louis—David Ranken, Jr., School of Mechanical Trades, 4431 Finney St., St. Louis 8, Mo.  
Vancouver—Clark College.  
West Virginia—W. Va. Institute of Technology, Montgomery, W. Va.

## Trade Directory

Lithographic Tech. Foundation  
Wade E. Griswold, Exec. Dir.  
131 East 39th St., New York 16, N. Y.  
National Assn. of Photo-Lithographers  
Walter E. Soderstrom, Exec. V.P.  
317 West 45th St., New York 36, N. Y.  
Lithographers National Association  
W. Floyd Maxwell Exec. Dir.  
381 Fourth Ave., New York 16, N. Y.  
National Assn. of Litho Clubs  
Frank H. Mortimer, Secy.  
5917 33rd St., N. W.  
Washington 15, D. C.  
Printing Industry of America  
James R. Brackett, Gen. Mgr.  
5728 Connecticut Ave., N. W., Washington 15, D. C.  
Internatl. Assn. Ptg. House Craftsmen  
P. E. Oldt, Exec. Sec'y.  
307 E. Fourth St., Cincinnati 2.

### LTF Research Inspected

The research department of the Lithographical Technical Foundation submitted its annual report to the research committee at a two day meeting, Feb. 28-March 1 at the Conrad Hilton Hotel, Chicago.

The new Color Chart, a revision of the one shown last year, was presented. The new chart shows a much wider range of colors and color combinations without duplications. The chart has been designed for production in individual plants from sets of standardized positives or negatives that will become available from LTF.

In addition to the report on the

Color Chart, the research department presented a progress report on its studies of quality and printability, paper and ink relationships, new methods of dampening, and studies of the Inkometer, Paper Hygroscope and Pick Tester.

### Can Designed For Lithography

A new 6-oz. aerosol can with cemented side seam which permits all-around lithography is being manufactured by Crown Cork & Seal Co., Inc., Can Div., Philadelphia. The can now is being used by Colgate-Palmolive Co. and lithographed in four colors.

FOR EVERYTHING THAT MAKES AN  
OFFSET PRESS A

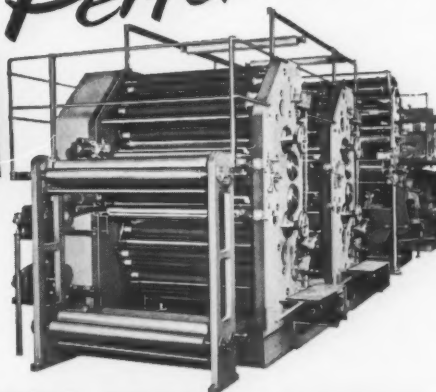
*Star Performer--*

THE  
*Hantscho*

35" x 50"

2-COLOR

HIGH SPEED  
PERFECTING



### ROLL FED LITHO PRESS & FOLDER

Especially designed for mass production at low operating cost, this popular press has been proved ideal for magazines, manuals, work books, children's books, encyclopedias, etc.

And it's loaded with new and exclusive developments in design and construction. For example: a new adjustable plate clamp to allow close registration on color work.

Some of the other special features of this press are

- ★ Smooth operation at speeds up to 16,000 cylinder r.p.h. assured by printing unit engineered on a three-frame principle, mounted on a heavy base.
- ★ Solid forged steel printing cylinders mounted on pre-loaded self-aligning roller bearings.
- ★ Accurate settings and positive locking on all roller adjustments.

★ Composition-covered ink vibrators to prevent stripping.

★ Vibrator motion adjustable to facilitate split fountain work.

★ Provisions for: electrically controlled side and running register. Dryer and water cooled rollers for the running of machine coated stock.

Cross and running perforation.

Built on the unit principle, this press can be supplied with one perfecting unit and folder. Other units can be added for as many as four or more colors, two sides. Rewinder, sheeting and special folder are also available. Standard infeed rolls stacks or automatic pasters can be easily attached.

When you want dependable printing performance that cuts production time and operating costs you want a HANTSCHO press.

For complete details write or wire.

**George Hantscho Company, Inc.**

602 SOUTH 3RD AVENUE, MOUNT VERNON, N. Y. • MO 7-8200, MO 4-9080  
MIDWEST OFFICE: 153 WEST HURON STREET, CHICAGO, ILL. • DE 7-3313

SENELITH  
**SUPER COAT**  
WITH  
**LITHOLAC**

**THE PERFECT PAIR**  
**FOR**  
**SMOOTH FIRM COATINGS**

**A COMPLETE LINE OF CHEMICALS & SUPPLIES**  
**FOR THE**  
**LITHOGRAPHER & PHOTO-ENGRAVER**



**THE SENEFELDER CO., Inc.**

69-20 — 48th Avenue

Woodside, New York

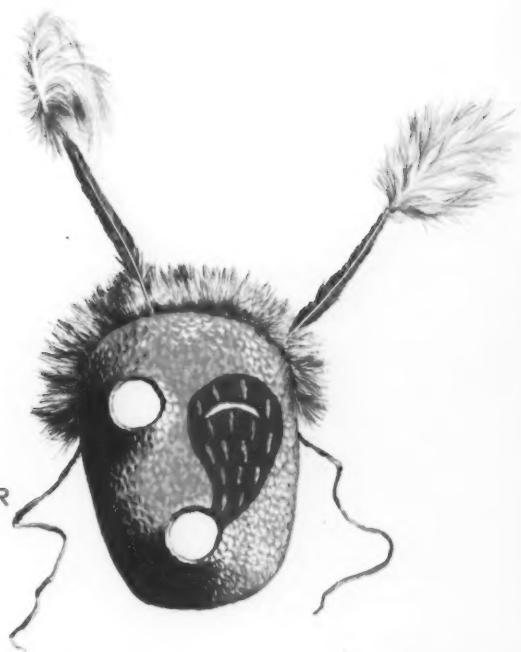
Telephone — TWining 9-3700-01

A Subsidiary of Philip Lockman & Company

NEW YORK CHICAGO DALLAS



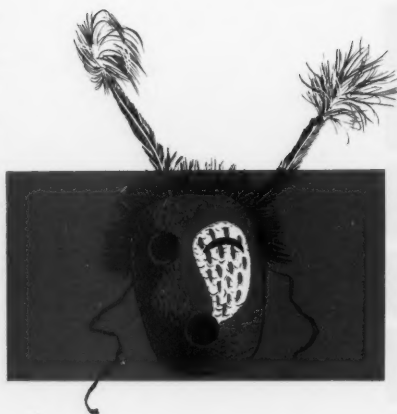
THERE'S NOTHING WHITER  
THAN FOX RIVER  
ARCTIC WHITE



# BOO!

This is a wooden mask, carved in the image of one of many evil spirits which, Eskimos believe, lurk in remote and lonely places. Here illustrated by Artist Ralph Jahnke is one painted a stark white and trimmed with fur and feathers. The closed eye peers out upon the spirit world from a field of pink, daubed with white spots.

On the faces of the medicine men, these masks are believed to dispel the evil spirits of illness and misfortune.



FOX RIVER BOND  
FOX RIVER OPAQUE  
ENGLISH BOND  
NATIONAL BANK BOND  
ANNIVERSARY BOND  
FOX RIVER ONION SKIN  
FOX RIVER OPAQUE ONION SKIN  
ANNIVERSARY ONION SKIN  
ANNIVERSARY VELLUM  
ANNIVERSARY BRISTOL  
ANNIVERSARY THIN CARD

# FOX RIVER ARCTIC WHITE

IN ELEVEN FOX RIVER GRADES

Always the finest for business, social and advertising use . . . Fox River cotton papers in new Arctic White make your selling easier . . . your finished jobs more beautiful.

FOX RIVER PAPER CORP., APPLETON, WIS.

Lithographed on Arctic White Anniversary Bond,  
100% cotton, sub. 20, cockle finish.

**alabama**—Montgomery—Weaver Paper Company  
**arizona**—Phoenix—Butler Paper Company  
Tucson—Butler Paper Company  
**california**  
El Centro—W. A. Scheniman Paper Company  
Fresno—Sierra Paper Company  
Long Beach—Sierra Paper Company  
Los Angeles—Columbia Paper Company, La Salle  
Paper Company, Sierra Paper Company  
Oakland—Pacific Coast Paper Company  
San Diego—Sierra Paper Company  
San Francisco—Davis-Cotton Paper Company,  
Pacific Coast Paper Company, Seaboard Paper  
Company  
**colorado**  
Colorado Springs—Butler Paper Company  
Denver—Butler Paper Company  
Pueblo—Butler Paper Company  
**connecticut**—Bridgeport—Equity Paper Company  
Hartford—Geo. W. Millar & Co., Inc.  
Madison—Geo. W. Millar & Co., Inc.  
New Haven—The Arnold-Roberts Co.  
**district of columbia**  
Washington—The Whitaker Paper Co.  
**georgia**—Atlanta—S. P. Richards Paper Co.  
**idaho**  
Idaho Falls—American Paper & Supply Co.  
Pocatello—Consumers Paper Corporation  
**illinois**—Champaign—Crescent Paper Company  
Chicago—Birmingham & Prosser Co., J. W. Butler  
Paper Company, La Salle Paper Company,  
Murnane Paper Company  
Peoria—Butler Paper Company  
Rock Island—C. J. Duffley Paper Co.  
**indiana**—Evansville—Butler Paper Company  
Fort Wayne—Butler Paper Company  
Indianapolis—Crescent Paper Company  
Terre Haute—Mid-States Paper Co.  
**iowa**—Cedar Rapids—Butler Paper Company  
Des Moines—Birmingham & Prosser Co.  
**kansas**—Wichita—Butler Paper Company,  
Southwest Paper Company  
**kentucky**—Louisville—Superior Paper Company  
Newport—General Paper Corporation  
**louisiana**—New Orleans—Butler Paper Company  
**maine**—Augusta—The Arnold-Roberts Company  
**maryland**—Baltimore—The Mudge Paper Company  
The Whitaker Paper Co.  
**massachusetts**  
Boston—The Arnold-Roberts Company  
Worcester—Geo. W. Millar & Co., Inc.  
**michigan**—Detroit—Butler Paper Company, The  
Whitaker Paper Company  
Grand Rapids—Central Michigan Paper Co.  
**minnesota**—Minneapolis—Butler Paper Company,  
C. J. Duffley Paper Company, The Paper Supply  
Company  
St. Paul—C. J. Duffley Paper Company  
**missouri**  
Kansas City—Birmingham & Prosser Co., Butler  
Paper Company, Weber Paper Company  
St. Louis—Birmingham & Prosser Co., Butler  
Paper Company  
Springfield—Butler Paper Company, Springfield  
Paper Company  
**montana**—Billings—Yellowstone Paper Company  
Butte—Butte Paper Company  
Great Falls—Great Falls Paper Co.  
**nebraska**—Lincoln—Schwarz Paper Company  
**new jersey**  
Jersey City—Gotham Card & Paper Co., Inc.  
Newark—Newark Envelope Company  
**new mexico**—Albuquerque—Butler Paper Company  
**new york**  
New York City—Geo. W. Millar & Co., Inc., The  
Paper Center, Inc., Saxon Paper Corporation  
**north dakota**—Fargo—Fargo Paper Company  
Minot—Fargo Paper Company  
**ohio**—Cleveland—Brewer-Chilcote Paper Co.  
Columbus—Cincinnati Cordage & Paper Co.  
Dayton—Nesbitt Paper Company  
Springfield—Nesbitt Paper Company  
Toledo—Cannon Paper Company  
**oklahoma**  
Oklahoma City—Oklahoma Paper Company  
Tulsa—Beene Paper Company  
**oregon**—Portland—Fraser Paper Company  
West Coast Paper Company

**pennsylvania**  
Philadelphia—Clinton Envelope & Paper Co.,  
A. Hartung & Company, The J. L. N. Smythe Co.  
Pittsburgh—Brubaker Paper Company  
Scranton—Elm Paper Company  
York—The Mudge Paper Company  
**rhode island**  
Providence—The Arnold-Roberts Company  
**tennessee**  
Chattanooga—Southern Paper Company  
Knoxville—Southern Paper Company  
Memphis—Western Newspaper Union  
Nashville—Bond-Sanders Paper Co.  
**texas**—Abilene—Southwestern Paper Co.  
Dallas—Southwestern Paper Co.  
Fort Worth—Southwestern Paper Co.  
Houston—Southwestern Paper Co.  
**utah**—Salt Lake City—American Paper & Supply Co.  
**washington**—Seattle—West Coast Paper Company  
Spokane—Independent Paper Company  
Tacoma—Allied Paper Company  
Walla Walla—Snyder-Creel Paper Co.  
Yakima—West Coast Paper Co.  
**wisconsin**—Appleton—Woeiz Brothers, Inc.  
Milwaukee—Nackie Paper Co., Standard Paper  
Company  
**export agents . . . new york**  
New York City—Champion Paper Co., S. A.



**Calcofluor\* White**  
puts "Glow-White"  
in offset papers!

(OVER)

# CALCOFLUOR

This page is a regular grade of offset stock—with A BIG DIFFERENCE! CALCOFLUOR\* White PMS Conc. has been added to give it a truly "whiter-than-white" sparkle and brilliance.

Just compare this page with any ordinary white sheet. Notice how the CALCOFLUOR-treated page improves legibility of the print...provides maximum contrast between black and white...improves and sharpens details in the halftone.

Papermakers...printers...package designers...advertising men find that CALCOFLUOR-treated offset stock gives EXTRA SELL to many paper items including:

Catalogs • Annual Reports • Artists' Papers • Business Forms  
Engineering and Architectural Drawing Papers • Sales Literature  
Manuals • Business Cards • Folders • Greeting Cards • Programs  
Letterheads • Books • Labels • Packages • Sanitary Tissues

Ask your printer to show you samples. Papermakers will be interested in our helpful Technical Bulletin, DYEING PAPER WHITE. Write to

\*Trademark



**CYANAMID**

AMERICAN CYANAMID COMPANY  
DYES DEPARTMENT  
Bound Brook, New Jersey

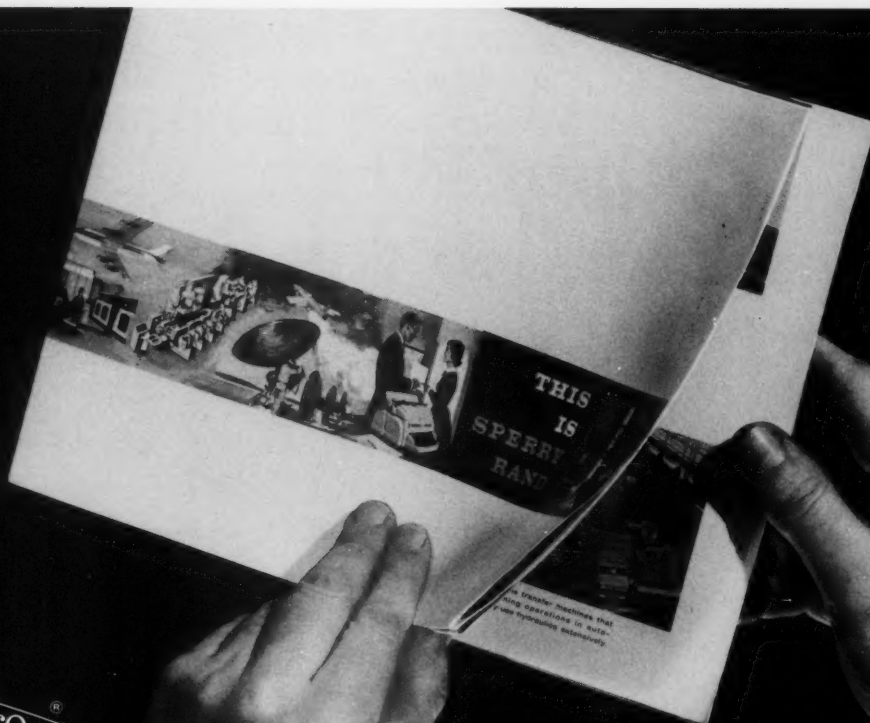
New York • Chicago • Boston • Philadelphia • Charlotte  
Providence • Atlanta • Los Angeles • Portland, Oregon

North American Cyanamid Limited  
Dyes Department, Montreal and Toronto

Printed on 100 lb. offset stock  
containing CALCOFLUOR White PMS Conc.



Symbol for Quality Dyes







**our way of life  
is built on printing**

Americans read more magazines, newspapers and books  
than any other people.

The printed word educates, entertains and enlightens...

It promotes new products, services and ideas.

Small wonder why 168,000,000 Americans live so well.

**INTERNATIONAL PAPER**



## new white HUDSON GLOSS

An outstanding, improved process-coated paper.  
Super-calendered to give a high gloss for quality letterpress  
printing of catalogs, cook books, house-organs, time-tables,  
travel folders, booklets and broadsides, using 110-120 line halftones.  
Available at low cost in 50-60 and 70 pound weights through  
leading paper merchants. Write for sample book.  
Please use your business letterhead, or consult  
your leading paper merchant.

**Other fine quality Mill Brand  
printing papers by International**

ADIRONDACK BOND	TICONDEROGA OFFSET
ADIRONDACK LEDGER	TICONDEROGA BOOK
BEESWING MANIFOLD	TICONDEROGA TEXT
INTERNATIONAL DUPLICATOR	TICONDEROGA TEXT, Coverweight
INTERNATIONAL MIMEO SCRIPT	LOUISIANA COLORED TAG
INTERNATIONAL TI-OPAQUE	OTIS BRISTOL
INTERNATIONAL OFFSET	HUDSON BOOK
SPRINGHILL INDEX	HUDSON COVER, C1S
SPRINGHILL COLORED INDEX	HUDSON LABEL, C1S
SPRINGHILL POST CARD	HUDSON LITHO, C1S
SPRINGHILL WHITE TAG	EMPIRE BOOK
SPRINGHILL MANILA TAG	WINN BOOK
SPRINGHILL VELLUM-BRISTOL	CONVERTING PAPERS

Printed by letterpress on  
Hudson Gloss, Basis 70.

  
**International Paper** COMPANY  
 FINE PAPER AND BLEACHED BOARD DIVISION  
 220 East 42nd Street, New York 17, N. Y.

### Werner Joins Payne Staff

Walter F. Werner has joined the sales staff of the Darling-Payne and Ernest Payne Corporations in New York. Mr. Werner spent four years with the Lithomat Corp. of Cambridge, Mass., as a salesman and trouble-shooter in the New York and Westchester areas, then three years with the successor company, Lithomat-Copy-Craft Corp. of New York. These seven years were followed by three years service with the Co-Litho Division of Columbia Ribbon & Carbon Co., of Glen Cove, New York, as salesman.

In his new work, Mr. Werner not only will promote the wide variety of offset presses and equipment for Darling-Payne Corp., but also the entire range of letterpress equipment handled by the Ernest Payne Corp.

### Offset Training Planned

Steps aimed at setting up a program for educating employers and employees of member companies in the techniques of operating an offset shop have been taken by the Master Printers Association of Suffolk County, New York.

The project has been urged by James Paxson, a past president of the association, who commented at a recent meeting, "If we wish to operate offset, why not start from scratch? Evening classes would be an incentive for many of us."

Two member companies have offered their shops as possible locations for classes and a special committee has been named to develop the plan and secure an instructor.

### Varn Expands Facilities

Varn Products Co., Inc., Flushing, N. Y., announced last month it is expanding its production facilities to meet increased sales.

### Court Hearing On Expansion

The effort of seven residents to halt construction of a \$150,000 addition to the Eureka Specialty Printing Co. plant, 530 Electric St., Scranton, Pa., has been taken to court.

Defeated in an attempt to block the addition at a hearing before the City Board of Zoning Appeals Dec. 17,

the property owners asked court to review the case, contending the board's decision was "illegal, erroneous and in excess of the discretionary power" of the board.

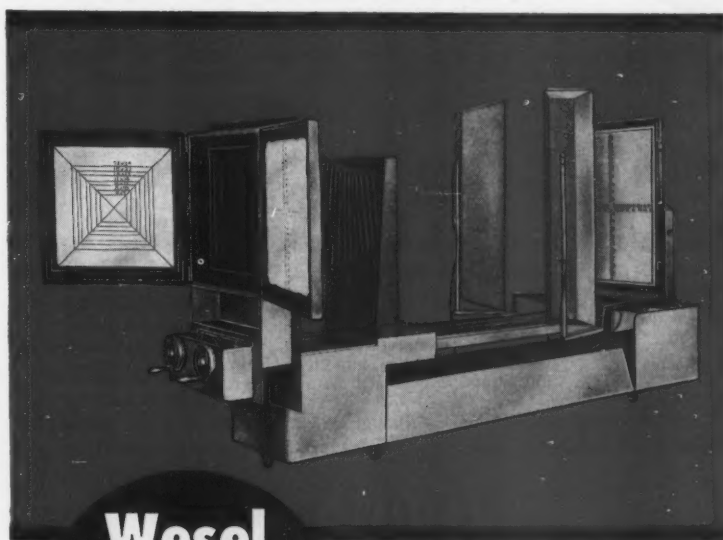
Superintendent of Building Inspection Joseph A. Corcoran refused to grant a permit for the expansion because a portion of the proposed warehouse, paper building and shipping room would extend into a "B," or residential zone.

The Board of Zoning Appeals granted Eureka a variance, which

was the go-ahead for construction of the addition.

At the board hearing, James H. Dunham, Jr., Eureka, president, indicated that Eureka could build the addition at its Danville, Ill., plant, where a \$750,000 expansion project already is under way on a 15-acre site. But he said the concern preferred to perform the planned expansion at its Scranton plant.

Eureka is considered one of the largest specialty printing firms in the country.



## Wesel 25 Camera

## A Low-Priced Camera With Many Outstanding Features

The Wesel 25 is a precision piece of equipment with built-in simplicity. It produces superb negatives! All camera operations . . . film loading, automatic timing, automatic sizing and focusing are done from one position at the rear of the camera. Designed for line and Autoscreen offset and photoscreen negatives. Size of back: 25" x 25". Tilting copy holder is 30" x 40". Entire unit is mounted on 3-point vibration-absorbing mounts. Investigate the savings that ownership of a Wesel 25 affords you.

*Write for descriptive literature today!*

- ★ Lower First Cost Price
- ★ Complete Package Unit
- ★ Saves Floor Space
- ★ LIFETIME Ball Bearings on All Critical Parts
- ★ LIFETIME Counter Numbers for AUTO-SIZE-FOCUS
- ★ LIFETIME Lathe-Like Monorail Design

## WESEL MANUFACTURING CO.

1141 N. WASHINGTON AVENUE

SCRANTON, PA.



only **ENCO**® offers  
a **PRE-SENSITIZED OFFSET PLATE**  
for **EVERY NEED!**  
and **MOST EVERY PRESS**

the **NEW Pacemaster** Economy  
**ENCO PRE-SENSITIZED PLATES**

The newest Enco Pre-sensitized plate. Developed for speed and economy. A negative working plate specially controlled acetate laminated to paper. Visible image and fastest exposure and processing, of any plate made. Available in most press sizes.

**ENCO PRE-SENSITIZED PLATES**  
**NEGATIVE-WORKING ALUMINUM**

Made for the critical lithographer. A quality plate for faithful reproduction of line and halftone work. Fine grained surface, fast one-step development. Unaffected by temperature or humidity. Heavy, scratch resistant aluminum. Easy to handle on the press.

**ENCO PRE-SENSITIZED PLATES**  
**POSITIVE-WORKING ALUMINUM**

The **FIRST** pre-sensitized positive working plate in America. For use wherever positive originals, film or transparencies are available, the economical alternate to deep etch. Gives positive image from positive original. Fine grained surface, visible image after exposure, unaffected by humidity. A fast, easy-to-process plate that's easy to handle on the press.

All Enco Pre-sensitized plates are available in sizes to fit most presses.

Enco "LS" Developer for aluminum plates, and the new 3RP Image Remover (Paste) are the newest aids for faster, better reproduction.

® by the originators of pre-sensitized plates.

**azoplate**  
Corporation  
SUMMIT, NEW JERSEY

ENGELHARD INDUSTRIES

Producers of Paper laminated acetate  
and aluminum pre-sensitized  
offset plates

**azoplate** SUMMIT, NEW JERSEY  
Corporation

Gentlemen: Please send us complete  
information on ENCO pre-sensitized  
plates.

for \_\_\_\_\_ size press.  
NAME \_\_\_\_\_  
COMPANY \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_

#### U. S. Printer Speaks At Memphis

The Hon. Raymond Blattenberger, U.S. Public Printer, recently addressed a joint meeting of the Memphis Printing Industry, Advertising Club of Memphis and the Sales Executive Club at Hotel Peabody. Other speakers were Charles Kennedy, executive secretary of the Southern Graphic Arts Association, Nashville; Samuel Burt, director of the Education Council of the Graphic Arts Association, Washington, D. C.; and Henry Porter, executive vice president of the GAA Council.

Mr. Blattenberger discussed the value of printing and said, in part, "If all printing were to be discontinued, we would start, after a period of indescribable chaos, on the way back to the days of unenlightenment from which we came."

#### Training Program Nears End

The Foreman's Management Training Program, sponsored by Printing Industries Association of Los Angeles, will conclude with the March 26 session. The course, which began Jan. 22 with 29 persons enrolled, is part of the expanding educational program of PIA whose aim is to provide specialized training to all levels of personnel employed in the graphic arts industry.

#### Wayne Colorplate Expands

A series of expansion moves for the Wayne Colorplate Co., Dayton, which began a year ago to add a fourth floor atop its building at 40 E. First St., was completed last month. E. Bartlett Brooks, president, said the firm's offset photography department now is located on the new fourth floor. He said new equipment for that floor and for the engraving department on the third has been added.

Wayne also is expanding to the second floor of the building where platemaking facilities will be located. The entire area will be air conditioned and have humidity control, Mr. Brooks said. The expansion will enable the company to offer a complete service in process color and black and white offset plates.



### Offset Leads T.&H. Calendar

Eight of the 12 sheets of the 34th edition of the Tileston & Hollingsworth Co. 1957 calendar were printed by offset lithography, the Boston Club of Printing House Craftsmen learned at a dinner-meeting, Feb. 11, at the University Club, Boston. William T. Clawson, sales promotion manager, Harris-Seybold Co., Chicago, calendar critic, was the speaker.

Mr. Clawson selected the January sheet, printed by offset, as his number two choice. The post card vote of the graphic arts selected it as number one. The post card vote comes from recipients of the calendar, who check their choice and comments, and return the cards to T&H Co.

The critic's first choice was December, printed by letterpress. The post card vote named it as number two.

The itinerary of the T&H Calendar review and analysis has been: Feb. 5, New Haven, Conn., with 169 in attendance; Feb. 6, Hartford, Conn., 115; Feb. 11, Boston, 375; Feb. 12, Springfield, Mass., 95; Feb. 13, Providence, R. I., 48; and Feb. 14, Worcester, Mass., 102.

Dates to come include March 14, Craftsmen's Club, Newark, N. J.; April 2, luncheon, Masonic Club, West 23rd St., New York City, sponsored by the Associated Printing Salesmen; April 3, luncheon, Brass Rail Restaurant, New York, Inside Advertising Week Program for college seniors, sponsored by the Advertising Federation of America; April 15, Rochester Institute of Technology, Rochester, N. Y.; and April 16, Syracuse Club of Printing House Craftsmen, Syracuse, N. Y.

Tileston & Hollingsworth Co., paper manufacturers, Hyde Park and Boston, Mass., co-sponsors of the annual calendar critique, with various Craftsmen's clubs and association graphic arts groups.

John G. Glover, Sales Representative, T&H Co., and a past president, Boston Craftsmen, is liaison between the paper company and the Craftsmen.

Choices of former critics, relative to monthly sheets, were: January

(offset lithography), 2nd; December (letterpress), 3rd and July (offset lithography), 1st.

Theme of the 1957 calendar was New England Festivals.

An impartial jury selected the 12 printers to print the calendar, each given a particular month, as the result of last year's "T&H Print-A-Calendar Contest." The jury was composed of Harry L. Gage, Gloucester, Mass., four-time calendar critic, as chairman; and Burton L. Stratton, Production Manager, Harvard University Press, Cambridge, Mass.

### Lithographers Granted Rights

Rights to use Adglow, a British process for production of point-of-purchase material, were granted recently to four U. S. lithographing firms: Western Lithographing Co., Los Angeles; Einson-Freeman Co., Snyder & Black, and Consolidated Lithographing Corp., all of N. Y.

Adglow, introduced in England in 1951, is described as a color transparency, which alternates parts of an advertising message, textual and illustrated, by means of intermittent or flasher backlighting.

You can **PROVE DUAL-LITH** superiority with...

## Quality... Engineering... Design

There's one built in feature that the Davidson Dual-Lith has that no other small offset machine can equal — that's **QUALITY** performance. You'll see it on every printed sheet — clean, sparkling line work... lively halftones... brilliant multicolor in both large-area solids and delicate tonal hues. **ENGINEERING**: Try to match the heavy-ribbed supporting castings, rugged forgings, precision-machined operating parts, generous bearings and clock-like functioning of the Dual-Lith. **DESIGN**: See the 8 quality processes that only the Dual-Lith (with its exclusive 2-Cylinder Principle) provides: simultaneous two-sided lithography, Davenporting, offset lithography, dry offset, letterpress, imprinting, numbering, perforating!

That's the Q-E-D of Dual-Lith Model 241 superiority



...ask for a demonstration and see!

Model 241 handles sheets from 3" x 5" to 10" x 14" from manifold to light cardboard. Receding Pile Jogger (optional) reduces paper handling, manual jogging. Roll-away dolly holds 5,000 sheets of 20-lb. stock or equivalent.



**DAVIDSON CORPORATION**  
A Subsidiary of Mergenthaler Linotype Company  
29 RYERSON STREET, BROOKLYN 5, NEW YORK  
Distributors in all principal cities and Canada

**DAVIDSON  
DUAL-LITH**

does more for you on one machine

Text set in Linotype • Headings in ProType

- ☐ Arrange Model 241 demonstration ML 3-7
- ☐ Send Model 241 brochure
- ☐ Send information on Receding Pile Jogger

Name \_\_\_\_\_  
Firm \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

**Looking for**

**Reduced Costs  
Cash Savings  
Increased Profits**

**Then You Are Looking for**

**SPECTRUM**

**Crescent's Latest Advance in  
Printing Ink Service**

Crescent's Spectrum Ink Service gives custom service with mass economies. Press down-time is reduced. Waiting for color okays is practically eliminated. The proper amount of ink is always available—without dead inventory. You buy in the best economic units. All phases of production are under your control. Interested? Send for the brochure which describes Crescent's Spectrum Ink Service -

*Look to Crescent for Ink Leadership*



**INK & COLOR COMPANY**

464 N. 5th St., Philadelphia 23, Pa.  
3901 W. Rohr Ave., Milwaukee, Wis.  
244 Forsyth St., S.W., Atlanta, Ga.

INKS FOR LETTERPRESS • LITHOGRAPHY • FLEXOGRAPHY • ROTOGRAVURE

**Plan Conference At RIT**

The 32nd annual Conference on Printing Education will be held July 28-Aug. 2 at Rochester Institute of Technology, Rochester. The conference, sponsored by the International Graphic Arts Education Association, will have as its theme, "Science and Its Place in Graphic Arts Education." Byron G. Culver, head of the Department of Printing at RIT, is chairman of the conference.

**Little Printers Visit Ink Co.**

The Little Printers Association of Indiana met last month at the A. E. Handschy Ink Co., Indianapolis, where members viewed different kinds of dryers and varnishes and their application to inks for various types of paper. The group also was shown the process of ink color matching.

**Photolith Installs New Press**

Photolith Printing Corp., New York, is installing a new two-color 50 x 68 Harris offset press. According to Edward Landes and Morris Shaman, company directors, the new addition to the Photolith line of equipment is scheduled for full operation early this month. The firm also has a 22 x 29 and a 38 x 50 press.

**Offset Seminar Planned**

Local 5, ALA, will hold a week-end offset seminar March 9-11 at Pere Marquette State Park, Grafton, Ill. Walter Creel, president, who will chairman the event, says the program will include lectures on legislative problems, economics, labor history, clarification of contract language, negotiation procedure and jurisdictional problems. Speakers who will cover these subjects include:

George Guernsey, educational director, AFL-CIO; Martin Grayson, special representative of PDI, division of Time-Life; Jack Wallace, International vice president, ALA; Walter Creel, president, Local 5; and Calvin A. Jack, treasurer, Ritterskamp Press, Inc.

There also will be educational movies. Cost of the seminar will be paid by Local 5 for its members.

### Company Offers Litho Classes

A new service for the printing industry has been launched by the Steward Company—a free weekly five-session evening course of instruction in operational technique of the camera, plate-making and general photo-mechanical equipment, according to the Los Angeles concern.

Admission to classes is free upon qualified application to owners and their employees in the industry. Classrooms, equipment and instructors are being supplied by the sponsor.

"We are emphasizing troubleshooting in the plate-making classes," said George Friedman, sales manager of the company. "The camera course covers the use and application of photo-chemicals, the operation and nomenclature of the camera, enlargements and reductions, and the development of line work and halftone negatives. Several sessions will be devoted to plate-making, using pre-sensitized plates."

Class enrollment is limited in number, so that teaching may be personalized. Students participate in actual operation of all equipment in the dark room. A further series of classes in process color camera work is anticipated, according to the company.

"You could call this 'Operation Know-How,'" said Mr. Friedman. "Actually, the response has been so good that we're going to have more applicants than we can take care of."

Bruce Greenberg, and Mr. Friedman, originators of the graphic arts refresher course, suggest those interested send for entrance application blanks immediately, addressing inquiries to Steward Company, 1701 West Pico Blvd., Los Angeles.

### Open House at N. Y. School

The various printing processes in action were on view to all interested persons at the Manhattan Schools of Printing during its Open School event for the entire month of February.

Dean Edward I. Miller announced that the entire facilities of the school, both at the new offset division, 72 Warren St., New York, and at the letterpress and composition division,

333 Sixth Avenue, were open to the general public, as well as to relatives and friends of students and to members of the graphic arts industry.

Teachers and students in the city schools were invited as special guests. Visitors at the Sixth Avenue branch, which is equipped with a large battery of Linotype, Intertype and Ludlow machines, had their names set in lead as souvenirs of the visit. At the offset division, souvenir sheets were printed and distributed to visitors.

The Manhattan Schools of Printing provide a complete program of graphic arts instruction. The industry is second largest in the New York metropolitan area.

### New Light Adapter

American Speedlight Corp., Long Island, will exhibit its line of Speedlights at the International Photographic Exhibition to be held at the National Guard Armory, Washington, D. C., March 22-31.

The firm will feature this year its continuous light adapter that allows the same flash tube to be flashed repetitively up to 120 flashes a second, giving a constant light for focusing, and then the same tube is fired for the film exposure.

### New Quarters For Valley

Valley Business Forms, recently organized Calistoga, Cal., lithography firm, has moved into a new building. Equipment now in use includes a roll-fed lithography press, an ATF collator, camera and platemaking facilities.

### Johnson Co. Lists Appointments

The board of directors of the William G. Johnston Company, Pittsburgh printing firm, appointed two new officers recently.

Harry M. Fritz, formerly secretary of the company, was named vice president. Replacing Mr. Fritz as secretary is Harry T. Gardner, a sales executive of the company. At the same meeting a letter was read announcing the resignation of Edward H. Sutton, 77, as vice president, an office he had held since 1934.



## Hamilton Bond is outstanding

There's a vast difference between bond papers, not only in the way they look but in the way they print. On each count Hamilton Bond scores heavily. It looks beautiful with its brilliant white, uniform surface, its strength and crispness, its unmistakable "bond" feel, and its genuine watermark made the traditional way in order not to interfere with the printing impression.

Hamilton Bond prints like a winner, because it is prehumidified to lie flat and feed smoothly. Your work is as good as your bond—and Hamilton Bond brings out the best in your work. It's outstanding.

## Hamilton Papers



**HAMILTON PAPER COMPANY**

Miquon, Pa.

Mills at Miquon, Pa., and Plainwell, Mich.  
Offices in New York, Chicago and Los Angeles

### New Arc Lamp Developed

A new arc lamp, rated at over 11,000 watts, has been developed by Macbeth Arc Lamp Co., Philadelphia. The new lamp consists of two 140-ampere *Constantarcs* in a dual wide-spread reflector. The lamp is supplied with a heavy-duty counterbalancing stand and four Macbeth self-ballasting automatic-regulating transformers which maintain arc voltage and current regardless of fluctuations in line voltage.

Macbeth designed the lamp, designated Model B-16C, specifically for applications where extremely high light-intensity and accurately controlled lighting is demanded for large printing frames.

### New Northwest Folder

Northwest Paper Co., Cloquet, Minn., has distributed a four-page folder, printed offset in four colors, describing and illustrating its line of Mountie Offset papers. Uses suggested by the firm include calendars, annual reports, folders, booklets or brochures.

### Color Program For YLA

Members of the Young Lithographers Association of New York were treated to a night of color at their meeting last month at the Advertising Club, New York. O. C. Holland, director of advertising for Interchemical Corp., IPI, presented a lecture and visual demonstration on

"The Magic of Color." Also shown was IPI's new film, "This Is Color."

The association has proposed a new slate of officers and elections will be held this month. The nominees include Robert Lewin, president; Jerry Urban, vice president; Erwin Beilitz, vice president; Richard W. Fenn, secretary; and John Ray, treasurer.

Nominees for the board of governors are John Heim, Gerald Reilly, James McNamara, Max Kissner, Earl Vanderbilt and Frank Leck.

## HOUSTON

(Continued from Page 32)

Transmission; Cullen T. Fyke, camera; William J. Licaroni, pressman; Walter Kachmar, pressman; Frank Weaver, reproduction superintendent; C. E. Lyles, camera—all from Tennessee Gas Transmission.

Delegates selected to attend the NALC convention are: Kenneth Joseph, club president and Bill Dodd and Bob Chester, board members. Alternate delegate appointed was Jake Ward, club vice-president.

A report on the NALC mid-year meeting was given by president Kenneth Joseph and Bill Dodd.

### Litho Clinic Set June 21-23

"Quality" has been selected as the theme for the sixth annual Southwest Litho Clinic, June 21-23 in Dallas. The clinic is being sponsored jointly by the Dallas and Houston Litho Clubs with L. C. Burnham, Beddoe Printing Co., chairman of the event.

The main subject of this year's clinic will be "Press Operation," but all phases and operations in the offset plant will also be covered. All demonstrations will be carried over closed circuit TV.

Some of the features being inaugurated this year include an actual press demonstration, presented by Harris-Seybold Co.; a Trade Fair where suppliers will display their products; and a program for wives of members attending the clinic.

Registration and reception will be conducted June 21, combined with the Trade Fair at the Adolphus Hotel, scene of all clinic activities.



**WATCH THE LIST GROW!**

*Performance*

**IS THE REASON**

**MIEHLE PRINTING PRESS & MANUFACTURING COMPANY**

**Miehle 17 Lithoprint**

#### ADDITIONAL INSTALLATIONS

Hitchcock Co.  
Main, Conn.

i & Lothrop  
ton, D. C.

McCullough  
Ill.

or Advertising Inc.  
yne, Ind.

M. Pierce Corp.  
aines, Iowa

Printer  
a, Kan.

en Prtg. Co.  
neapolis, Minn.

erbrook Pen Co.  
ien, N. J.

W. Gregory Co.  
hester, N. Y.

ttenburg Press  
man, Okla.

Office Service Co.  
ottstown, Pa.

Comer's Print Shop  
Oroville, Cal.

Colorado Prtg. Co.  
Grand Junction, Colo.

Charles L. Story Co.  
Wilmington, Del.

St. Petersburg Prtg. Co.  
St. Petersburg, Fla.

The Donaldson-Woods Co.  
Atlanta, Ga.

South Shore Printers  
Chicago, Ill.

Model Printers  
Moline, Ill.

Bower Show Print  
Crawfordsville, Ind.

L. H. Prtg. Co.  
Morgan City, La.

Cornelius Prtg. Co.  
Silver Spring, Md.

Marysville Prtg. Co.  
Marysville, Mich.

Chas. E. Brown Prtg. Co.  
Kansas City, Mo.

M. Zimmerman & Sons  
Wildwood, N. J.

Franklin Prtg. Co.  
Niagara Falls, N. Y.

Electric City Press  
Schenectady, N. Y.

Bradford Prtg. Co.  
Winston-Salem, N. C.

Advocate Prtg. Co.  
Newark, Ohio

Community Press  
Philadelphia, Pa.

Electric City Prtg. Co.  
Anderson, S. C.

Baker Prtg. Co.  
Corpus Christi, Tex.

Whittet & Shepperson  
Richmond, Va.

Universal Prtg. Co.  
Seattle, Wash.

The Cedarburg News  
Cedarburg, Wisc.

Joseph Maurer & Son  
Marinette, Wisc.



### Arthur C. Saylor Dies

Arthur C. Saylor, 77, a director and member of the executive committee of the United States Printing & Lithograph Co., Cincinnati, died Feb. 8 in Wesley Memorial Hospital, Chicago, after a brief illness resulting from a heart ailment. A native of Naperville, Ill., he had resided in Cincinnati since 1923.

Mr. Saylor was associated with U.S. Printing & Lithographic Co. during his entire business career. He started as an office boy in one of the branch plants in Chicago in 1895, and became manager of the Chicago office in 1906. He transferred to Cincinnati as general sales manager in 1923, became division manager of the Cincinnati plant in 1936, was made a vice president in 1937, and a year later was elected to the board of directors. He retired from active management in May, 1946, after 51 years of service with the company, but continued as a member of the board of directors, and subsequently became a member of the executive committee in April, 1954.

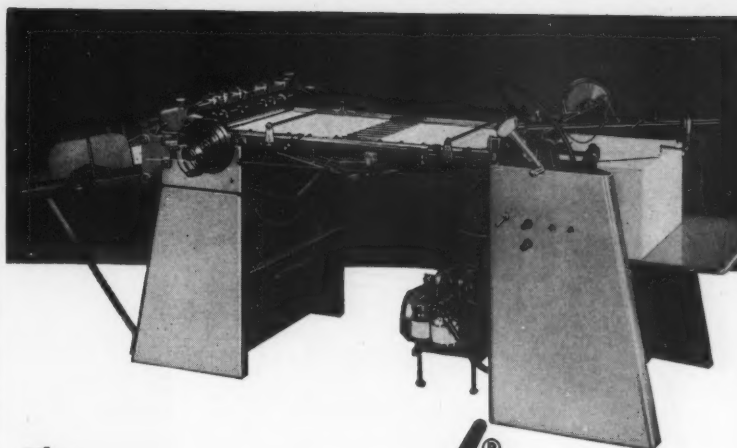
### Mallinckrodt Appoints Kuehne

The appointment of E. Richard Kuehne as regional sales manager was announced last month by W. S. Keutzer, western division sales manager, Mallinckrodt Chemical Works, St. Louis. Mr. Kuehne has served as Chicago district sales manager for Mallinckrodt since 1954. In his new appointment he will have the additional responsibility of supervising sales activities in Minnesota, North Dakota and South Dakota.

### Plan Yugoslav Printing Exhibit

An International Printing Machinery Exhibition will be held April 13-23 in Zagreb, Yugoslavia, in conjunction with the 1957 Zagreb Spring Fair. This is the first time a specialized exhibition in the printing industry has been organized in Yugoslavia.

According to *Printing News* of London, Eng., the Yugoslav government is planning to reconstruct and modernize the country's printing industry, and foreign currency has been allocated for the purchase of printing machinery.



## The Rosback® Automatic Slot Perforating Machine

**incorporates BOTH feeder and perforator**

Now, for the first time, you can secure a fully automatic slot perforating unit which includes both perforator and automatic feeder built in its entirety by one manufacturer. With this Rosback machine, you are assured *complete responsibility* for satisfactory operation from a single source, because perforator and feeder have been designed and built as a team for most efficient production.

Here is a perforator which guarantees you high speed, accurate perforating

with high speed automatic feeding for profitable volume output.

A few of the important innovations which are incorporated in the Rosback Automatic Slot Perforating Machine are detailed in the box below. Compare your needs with these unusual advantages—you'll find your answer for meeting today's demands for accurate, high-speed slot perforating. For complete information, write for specification sheet or see your Rosback dealer.

### OPERATING ADVANTAGES

Two sizes—30" and 36".

Speed—up to 12,000 per hour.

Feed Table accommodates 24" pile.

Handles stock from 9# manifold to post card weight. Minimum sheet size 6" x 6".

Patented pile elevating mechanism extremely sensitive. One adjustment compensates for thick and thin stocks.

Safety disconnect switch stops feeder if pile is exhausted.

Double pump—one for vacuum, one for pressure. Vacuum and pressure regulated independently.

All air controls and stop-start switches directly in front of operator.

Special vacuum valve enables operator to switch quickly from strike to continuous perforating.

Tape section equipped with micrometer side adjustment and simple tape-tension adjustment.

Extension delivery and automatic jogger available as optional extra.

**F. P. ROSBACK COMPANY • Benton Harbor, Mich.**

WORLD'S LARGEST MANUFACTURERS OF PERFORATORS,  
WIRE STITCHERS AND PAPER PUNCHING MACHINES



*You'll be Surprised...*

how easy and profitable  
it is to use  
**GUMMED PAPER**  
in your  
**OFFSET PRINTING**

*especially on*  
**PERFECTION®**  
**FLAT GUMMED PAPER**

a quality gummed paper  
you can ALWAYS depend on!

There is Nothing Finer!



More and more Lithographers find that PERFECTION® Flat Gummed Paper can be used in Offset Printing without difficulty. Cut true to size and perfectly square, good register is assured on every job. Grades and colors to meet any requirement: always uniform.

Ask for PERFECTION® . . . from your Perfection Distributor; complete list may be found in Walden's "Paper Catalog."

116

Perfection is made by  
**PAPER MANUFACTURERS CO.**

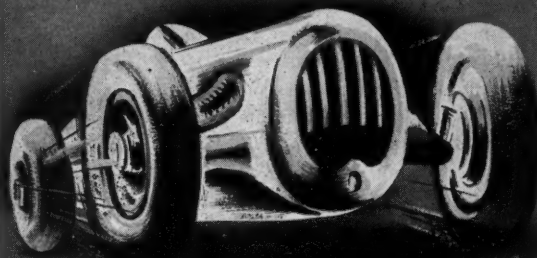
PHILADELPHIA 15, PENNSYLVANIA

SALES REPRESENTATIVES

Atlanta, Chicago, Cleveland, Kansas City, Los Angeles,  
New England, New York, Philadelphia

**HANCO**  
**SPEEDOL**

**PRESS CLEANING  
SOLUTION**  
**FAST... FAST... FAST...**



**COMPLETELY DISSOLVES  
IMPREGNATED INKS**

"Speedol" quickly removes even deeply impregnated dirty ink film from press rollers, dried ink and residue that other wash-up solutions fail to remove. Thoroughly cleans and reconditions rollers and gives them new life.

**Go from Black to Yellow in ONE washup!**

Simply wash off ink with regular solvent, then apply "Speedol" to remove blacks, blues, dried gum, etc. Only ONE special cleaning solution required. . . . "SPEEDOL". In semi-liquid paste form, "Speedol" contains NO ACIDS, ALKALI or other irritating solvents. PRICED LOW!

**MONEY- TRIAL ORDER** ML 357

**A. E. HANDSCHY CO.**, Chicago 7, Ill.  
125 S. Racine Ave., Chicago 7, Ill. ordered below on your  
Send us the quantity of "Speedol" trial offer.  
Satisfaction or money-back guarantee.

1 Gallon Can. . . . .	\$3.25
1 x 5 Gal. Can. Gallon. . . . .	2.75
1 x 50 Gal. Drum. Gallon. . . . .	2.50

SIZE . . . . .  
Company . . . . .  
By . . . . . Zone . . . . . State . . . . .  
City . . . . .

**A. E. HANDSCHY CO.**

Manufacturers of Fine Letterpress and Offset Printing Ink.

CHICAGO 7, ILL. 125 South Racine Avenue  
MINNEAPOLIS 15, MINN. 422 South Third Street  
INDIANAPOLIS 4, IND. 225 North New Jersey St.

**DISTRIBUTORS**

Handschy Distributors located in all principal cities.  
Write for name and address of Distributor nearest you.

# Books and other Aids . . .

## How to Prepare Art and Copy for Offset Lithography

By William J. Stevens and John McKinvan

Twelve chapters with over 125 illustrations, two- three- and four-color lithography throughout. 8½ x 11", cloth-bound, hard covers. A colorful and highly useful book for your library. Widely used in schools.

POSTPAID \$5.25

## Color Chart for Dot Etching

This chart, composed of four sheets, is 22½ x 26½", and is bound at the top with a metal strip for wall hanging. The first sheet is magenta, cyan blue, process yellow and black. The second is warm red, cyan blue, process yellow and black. Number three is magenta, warm blue, process yellow and black, while the last is warm blue, warm red process yellow and black.

Each of the four pages contains 215 color squares. Each square of color is identified, and each square is divided into four different percentage screen tints. It was produced on regular offset stock on a two-color offset press.

COMPLETE FOUR-PAGE WALL CHART — \$10

## "The Single Color Offset Press"

By I. H. Sayre

Different types of offset presses are detailed; then the step by step mechanical operation and adjustments of four Harris-Seybold Co. presses — the earlier sheet-fed LSB and LSN, and the newer models with selective stream and sheet feeding, LTV (17 x 22) and LTW (21 x 28). Webendorfer presses (Chief, Little Chief and Big Chief) are discussed with complete instruction for operation, followed by a discussion of the larger presses — the EBCO (Miller Printing Machinery Co.) and the Miehle 29 and Miehle 36.

The book points up the general similarity of handling of the various presses, at the same time explaining the special characteristics of each. Primary objective of the book is to acquaint the reader with the precision and care that is required in handling offset presses, and to demonstrate how to obtain trouble-free operation.

In addition to the specific treatment on presses, there is a section on blankets, papers, inks, rollers, plates, fountain solutions, and other materials used by offset lithography.

The book is cloth bound in bright red, washable cover, 255 illustrations, printed on offset enamel stock, and sewed in 16"s so that it lays open flat. \$6.50 plus postage.

## Point of Purchase Cardboard Displays

By Victor Strauss

First complete book covering the subject. Contains visuals of all kinds of displays, with a complete construction plan for each one shown. There are 226 blueprints, coded and self-explanatory. Discussion covers dummies, instruction sheets, cartons, packing and shipping. Another section covers items such as motors, flashers, rivets, hooks, rubber bands and other fasteners and devices.

It's 9 x 12", 218 pages, and a book every display man will need. Price, \$15.00.

## Order Direct From MODERN LITHOGRAPHY

### Modern Lithography

Box 31, Caldwell, N. J.

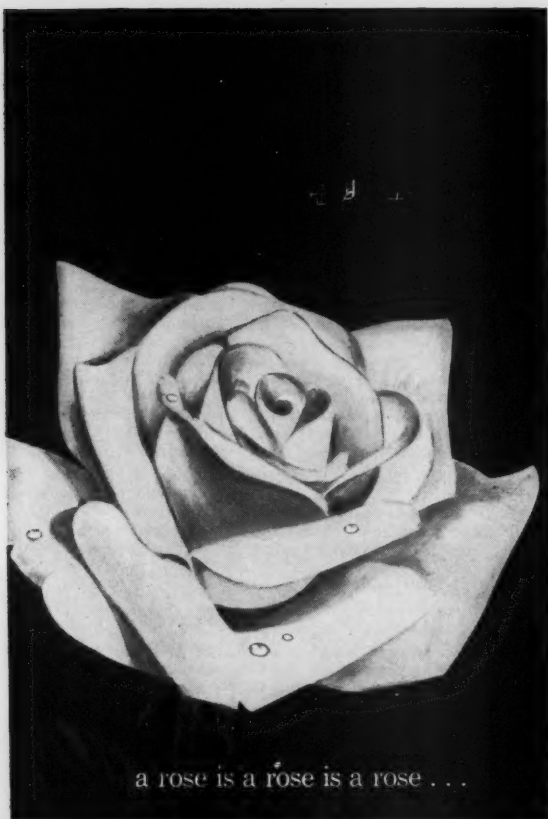
Enclosed is payment. Please send the book (or chart), as checked

- ☐ How to Prepare Art & Copy — \$5.25
- ☐ The Single Color Offset Press — \$6.50
- ☐ Color Chart for Dot Etching — \$10.00
- ☐ Point of Purchase Cardboard Displays — \$15.00

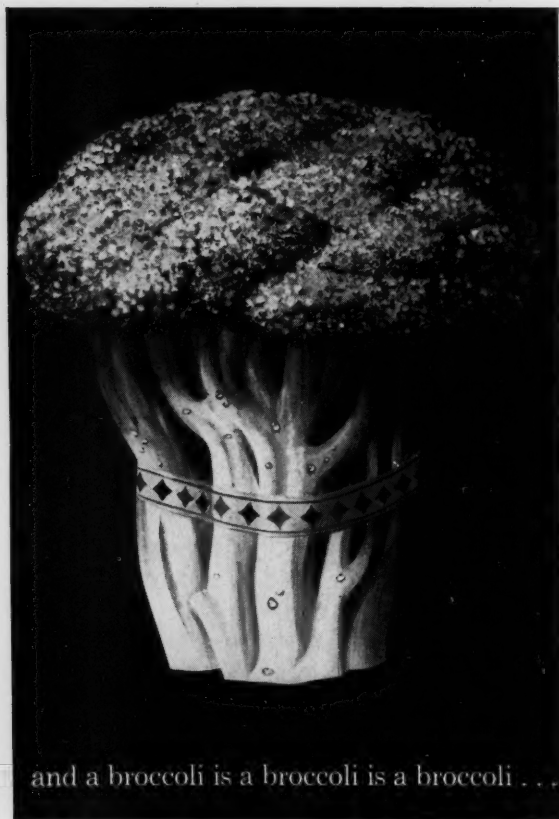
Name .....

Street .....

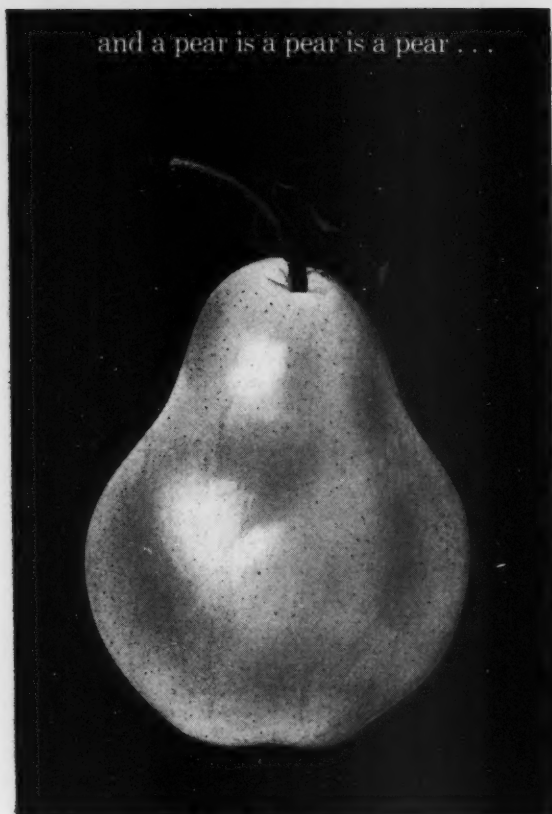
City, Zone, and State .....



a rose is a rose is a rose . . .



and a broccoli is a broccoli is a broccoli . . .



and a pear is a pear is a pear . . .

when you print on

## Trojan 3D Gummed Paper

- *More faithful reproduction*
- *Greater range of flatness*
- *Faster feeding and delivery*

DEVELOPED exclusively for the entire Trojan line, 3D is the most exciting new processing method in many years. Trojan 3D\* Gummed Papers feed, deliver and jog more quickly; they have a wider range of flatness; they take ink exceptionally well and will give a better-looking finished printed piece every time. One trial run should convince you. For free sheet samples plus full color reproductions of the illustrations in this advertisement, write Dept. ML-257, today.

\*Patent applied for

**The  
Gummed Products  
Company**

Troy, Ohio • Subsidiary of St. Regis Paper Company





### Atkins New W-P Mill Manager

Ralph A. Atkins has joined Whit-ing-Plover Paper Co. as mill manager, it has been announced by Thomas Leech, president of the Stevens Point, Wis., firm. Mr. Atkins formerly was superintendent of the Gilbert Paper Co., Menasha, Wis. and, for many years, general superintendent of the Lee Paper Co., Vicksburg, Mich.

### Dayton Rubber Names Alred

W. M. Alred, Jr., Decatur, Ga., has been appointed sales engineer of Dayton Rubber Company's printing roller division. He formerly was associated for 10 years in sales capacities with Addressograph-Multigraph and Harris-Seybold Co. Mr. Alred will make his headquarters in Atlanta.

### Hogan in New IPI Post

Thomas J. Hogan, service engineer, has been appointed to the post of sales representative of Interchemical Corp., IPI, Cambridge, Mass., it was announced by the firm's newly-appointed New England manager, R. Curtis Reed. Mr. Hogan has been a service engineer in the ink industry for the past 17 years.

### Third Canco Plant In Texas

American Can Co. has begun construction on its third Texas plant, a million dollar, 115,000 sq. ft. factory at San Antonio which will produce up to 275 million cans a year for beer and food products. According to the firm, no metal lithography will be done at the factory.

## THREE-COLOR

(Continued from Page 38)

trast pan, coated on an acetate base.

*AnSCO Reprolith Ortho Type B.*—High contrast ortho, on acetate base.

*Kodalith Pan.*—High contrast pan, coated on an acetate base.

*Kodalith Ortho Type 2.*—High contrast ortho, on acetate base.

*Kodalith Ortho PB.*—High contrast ortho, on .005" PB base.

*Du Pont Photolith A.*—High contrast ortho, on Cronar base.

*Gevaert Litholine Film.*—High

contrast ortho, on acetate base.

*Gevaert Litholine Film PB.*—High contrast ortho, on polystyrene base.

*Gevaert Litholine Pan.*—High contrast pan emulsion on acetate base.

*DuPont Process Pan.*—High Contrast pan emulsion on acetate base.

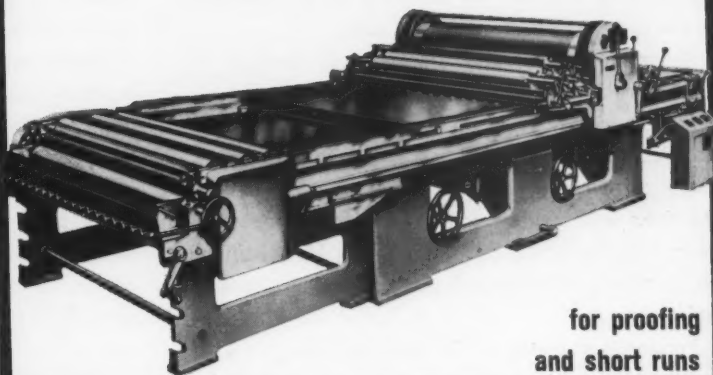
*Ilford Pancroline Process Pan.*—High contrast pan on acetate base.

(Note: when making reference to this type of film in this series of articles we will use the general term "contrast pan" without reference to

any specific brand name.)

**CONTINUOUS TONE FILMS.**—This type of film has an emulsion which produces a negative ranging in tones from a pure white, through the intermediate tones of gray to black. This is the type film used in all amateur cameras. These emulsions are available in both ortho and pan sensitivities. Their primary use in direct separation is for the making of the principal color masks. Typical of this type of emulsion are the following

## get RESULTS THAT RIVAL PRODUCTION PRESS QUALITY with economical S&S FLATBED OFFSET PRESSES



for proofing  
and short runs

S&S presses give you proofs—and short runs—that compare in quality with production press work... because they're built for the job! Top offset plate-making and printing houses\* use 2, 3 and more S&S presses, because they deliver sharp, even impressions, absolute register and maximum quality with minimum set-up and wash-up time. Dependably serviced by Amsterdam Continental.

**EXTRA-PROFIT NOTE:** capitalize on specialty printing opportunities with the S&S—unique bed suspension permits printing on metal, fabric, plastics.

**WRITE OR CALL FOR DETAILS AND SPECIFICATIONS**

\*Names and data on request.



Amsterdam Continental Types and Graphic Equipment, Inc.  
268 Fourth Avenue, New York 10, N. Y.




SPring 7-4980

Ask  
about

world famous reproduction and plate-making  
machines by Hoh & Hahne of West Germany.

Use  
**REPETEX**  
step and repeat  
machine for  
most advanced  
precision and  
efficiency.

Are  
you  
interested  
in

-  Color Process Reproduction
-  Presensitized Plates
-  Photography



If you are, then here's your chance to get a practical present for your litho shop, simply by sending in an additional subscription to MODERN LITHOGRAPHY right now. Just check the booklet that most interests you and we'll put it in the mail to you as soon as we receive your order.

**Color Process Reproduction**, by *Andy Perni*, is the most popular reprint ever offered to ML readers. It contains useful information that will help you understand color and help you in your job. For example, it describes filters, filter factors, and gray scales; masking the direct separation negatives; masking direct separations; continuous tone retouching; making halftone positives and other subjects, with numerous drawings and photos.

**Presensitized Plates**, by the *ML staff*, tells you what you want to know about this important subject. Includes

a survey of lithographers who have actually used the plates, telling what they *like* about them and what they *dislike*. Full page table lists six major manufacturers, and 17 characteristics of each plate, for ready comparison. Report by Mike Bruno gives the LTF's views on presensitized plates.

**Photography**, by *John Lupo*, is a four-part reprint of a series which appeared in ML earlier this year. It covers f openings, use of the densitometer, actions of the developer, etc. A valuable aid to the beginner and a handy guide for the professional.

So, take your pick. Which booklet will help you most? Just fill out the coupon below and return it, but be sure to check the booklet you want for your gift. An extra copy of MODERN LITHOGRAPHY will give *more* men in your shop *more* time to enjoy the leading magazine in the litho field—covering *only* lithography.



Yes, start my subscription to ML and send me, immediately, the booklet I have checked at right.

Company \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

Postal Zone \_\_\_\_\_ State \_\_\_\_\_

Subscription Address \_\_\_\_\_  
(If different from above)

☐ 2 years \$5

☐ 1 year \$3

Above rates are for U. S. and U. S. possessions ONLY.

CANADA: \$4 ☐ 1 year; \$7 ☐ 2 years (payable in Canadian or U. S. funds)

LATIN AMERICA: \$4 ☐ 1 year \$7 ☐ 2 years

OTHER COUNTRIES: \$9 ☐ 1 year \$15 ☐ 2 years

<input type="checkbox"/>	Color Process Reproduction
<input type="checkbox"/>	Presensitized Plates
<input type="checkbox"/>	Photography

# CUT PROCESS EXPOSURE TIME

## IN HALF

### with GRAFARC HIGH INTENSITY ARC LAMPS

#### GRAFARC 95 AMPERE PRINTING LAMP

For use with vertical  
printing frames under  
40" x 50"

#### GRAFARC 140 AMPERE PRINTING LAMP

For use with vertical  
printing frames 40"  
x 50" and larger.

Sharper reproduction. Dot under-  
cutting eliminated. Uniform coverage  
of large areas. Illumination variables absolutely  
eliminated.

Accurate density control regardless of line voltage  
variations. Constant color temperatures. Power-packed for  
dense Kodachromes.

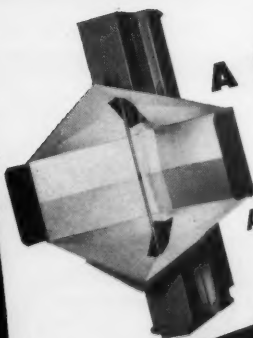
Motor-driven . . . fully automatic . . . reliable. Overhead  
printing lamps available for use with horizontal printing  
frames. Burn in normal position, avoiding smoking of re-  
flector and preventing ash from depositing on surfaces in  
the light path.

Models for Monotype Huebner MH  
photo composing machines assure pre-  
cise control of intensity for accurate  
repeats.

**Priced Unbelievably Low!**  
**A NEW AND BETTER CAMERA ARC LAMP**  
**The Grafarc Challenger**

Dual function motor advances carbons, strikes the arc, establishes correct  
gap length, and feeds carbons so as to maintain proper gap.

**ACCURATE EXPOSURES OF AS SHORT AS FIVE SECONDS**  
2 Models: 75 and 110 amperes high intensity.



See your Graphic Arts Supply  
Dealer or send coupon for  
literature.

#### THE STRONG ELECTRIC CORPORATION

17 CITY PARK AVENUE • TOLEDO 1, OHIO

Please send free literature on Strong Grafarc Lamps.

NAME \_\_\_\_\_

FIRM \_\_\_\_\_

STREET \_\_\_\_\_

CITY & STATE \_\_\_\_\_

NAME OF SUPPLIER \_\_\_\_\_

A SUBSIDIARY OF



# CHALLENGE:

## TO THE "MEN FROM MISSOURI"

Who want to see  
**COMPLETE VERSATILITY**  
**UNEQUALLED ACCURACY**  
**OVERALL DEPENDABILITY**

Let us demonstrate the

### CAESAR-SALTZMAN CONDENSER TYPE ENLARGER

Here's our answer to your demands for a Caesar-Saltzman Enlarger with Condenser Light Source. We have added to the sturdy, time proven Enlarger a flexible Condenser Light Source which is the product of much research and experimentation. The Enlarger with condenser Light Source has been thoroughly tested by some of the top men in the professional field and their verdict is "everything we asked for and more."

#### Accessories Available:

- Three Point Glass Negative or Peg Registration System
- Lenses of Short Focal Length for Reductions
- Cones of Various Lengths for Reductions
- Variac for Control of Light and Kelvin Output for Color Separations
- Electronic Timer
- Special Positive Interlocking Lens and Camera Motion
- Precision Reducing Negative Holders
- Vacuum Easel and Vacuum Pump

#### PARTIAL LIST OF USERS

Daily News  
 New York, N. Y.

Process Litho  
 Chicago, Ill.

Rochester Institute of Tech.  
 Rochester, N. Y.

Pringle & Booth, Ltd.  
 Toronto, Canada

C. F. Braun & Co.  
 Alhambra, Calif.

McCall's Magazine  
 Stamford, Conn.

Knapp Engraving  
 New York, N. Y.

Western Lithographing Co.  
 St. Louis, Mo.

Krug Litho Arts Co.  
 Kansas City, Mo.

San Francisco Police Dept.  
 San Francisco, Calif.

Commercial Printers  
 Columbus, Ga.

Courier Journal & Louisville Times  
 Louisville, Ky.

The Osborne Co.  
 Clifton, N. Y.

Eastman-Kodak  
 Rochester, N. Y.

Consolidated Vultee Aircraft Corp.  
 San Diego, Calif.

Dept. of National Defense  
 Ottawa, Canada

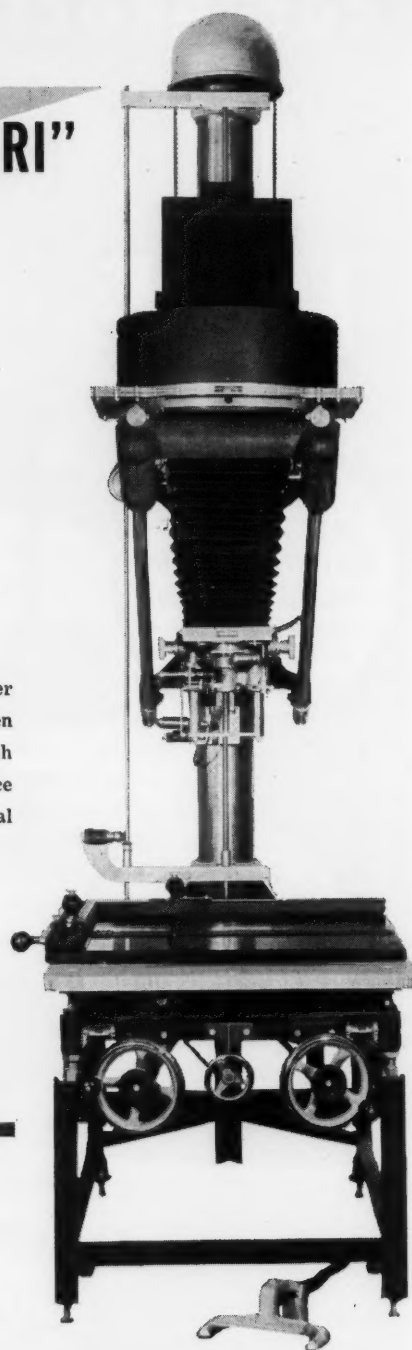
Wm. Becker Studio  
 New York, N. Y.

King Studio  
 Chicago, Ill.

Miami Herald Publishing Co.  
 Miami, Florida

Sharecator  
 New York, N. Y.

Army Chemical Center  
 Edgewood, Maryland



Write For Complete Literature

Headquarters for Professional Photographic Equipment Since 1920

**CPS J. G. SALTZMAN, INC. CPS**  
 SALES DISTRIBUTORS for CAESAR MANUFACTURING, INC.  
 480 Lexington Avenue, New York 17, N. Y.



brand products:

**Kodak Super XX Pan.**—Fast pan emulsion on acetate base.

**Kodak Panatomic X.**—Medium speed pan on acetate base.

**Kodak Pan Masking Film.**—Medium contrast emulsion designed for masks.

**Gevaert Pan.**—Medium speed long range emulsion on acetate base.

**DuPont Arrow Pan.**—Continuous tone long scale pan emulsion on acetate base.

**Ilford FP—3.**—Medium speed long scale continuous tone pan on acetate base.

**AnSCO Super Pan Press.**—Continuous tone on acetate base.

**AnSCO Isopan.**—Continuous tone on acetate base.

(Note: when making reference to this type of film in this series we will use the general term "continuous tone pan" or "continuous tone ortho," without reference to specific brand names.)

Developers used for color separation also can be divided into two general categories, namely, *contrast developers*, and *continuous tone developers*. The contrast developers are used on high contrast films, and produce dense blacks and pure whites. They do not reproduce the intermediate tones of gray. This type of developer is the standard litho developer used for all types of line and halftone work.

The continuous tone developers can be used on both the high contrast films and the continuous tone materials. When used on high contrast films they extend the scale of the emulsion so that they are able to record on the negative some of the intermediate tones of gray. In some cases this combination of high contrast film with continuous tone developer has achieved excellent results in masking. When used on continuous tone films, this type of developer produces any tonal scale required. It will reproduce the whites, grays and blacks of the original.

(Note: when making reference to these developers we will use the following general terms: Contrast devel-

oper will be referred to as a *lith developer*, continuous tone developer will be referred to as a *tone developer*, without reference to specific brand names.)

We have just had a general introduction to color separation, covering rather briefly the process of additive and subtractive color, the effect of filters on a transparency, and a general description of films and developers. In the April issue of MODERN LITHOGRAPHY, we will discuss the densitometer, its use and applications in color separation, together with the types of cameras and other equipment suggested for this type of reproduction.

For those interested in further references on the subject of color we have listed below some books of interest:

AN INTRODUCTION TO COLOR, by *Ralph M. Evans*; PHOTOGRAPHY, ITS MATERIALS AND PROCESSES, by *C. B. Neblette*; PHOTOGRAPHY, ITS SCIENCE AND PRACTICE, by *J. R. Roebuck*; PHOTOGRAPHY AND PLATEMAKING, by *I. H. Sayre*; PHOTOLITHOGRAPHY, by *Bruce Tory*; KODAK COLOR HANDBOOK; KODACHROME AND EKTACHROME, by *Fred Bond*; COLOUR PRINTS, by *Jack H. Coote*; and TONE AND COLOR CORRECTING—Lithographic Technical Foundation. Skilled Craft Text 510/11. ★



**COLOR CHANGES  
ARE A CINCH!**



with  
ROLLERS  
BLANKETS  
RUBBER  
PLATES  
DIES

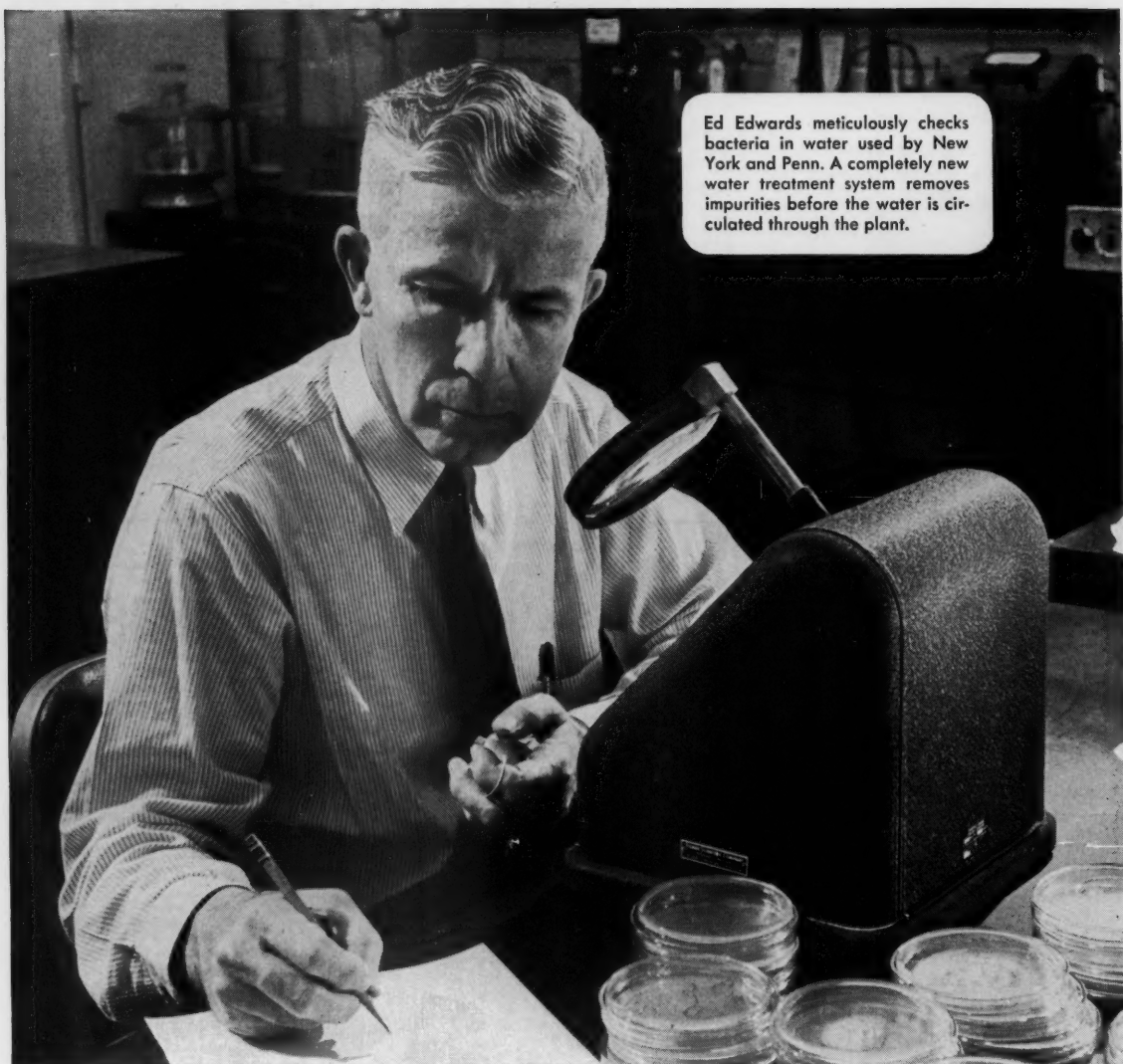
**REMOVES  
GLAZE—  
CLEANS &  
CONDITIONS**

**REVITALIZES as it CLEANS!**

Try it—order today from your dealer  
FREE! Write Dept. M for "Modern Techniques  
in the care of all rollers and blankets"



**ANCHOR CHEMICAL CO., INC.**  
"SOLUTIONS FOR GRAPHIC ARTS PROBLEMS"  
829 BERGEN ST. BROOKLYN 38, N.Y. MAIN 2-8006



## HIS MICROBE HUNT MAKES PAPER BETTER

Ed Edwards, Water Engineer at New York and Penn's Lock Haven, Pa., mills, isn't on the brink of discovering a new miracle drug . . . but he *is* the man who helps make sure the paper you buy is clean and free of impurities!

Hundreds of gallons of water go into the making of every pound of paper. And it's Ed Edwards' job to perform mass murder on that water's bacteria population. He wages the same battle against common dirt, too.

Ed Edwards—and men like him—super-  
vise the purification of enough water at each

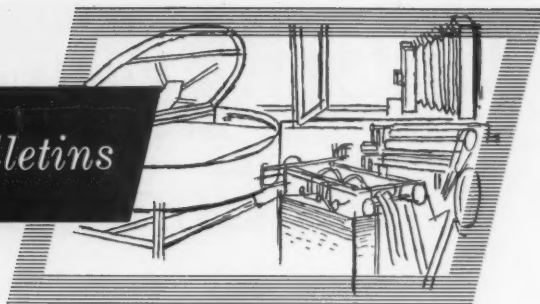
New York and Penn mill to supply a large city. It's a big job . . . yet it's only part of New York and Penn's quality control over every ingredient, from wood chips and pulp to chemicals and fillers.

If you'd like to know some of the reasons why New York and Penn papers print better, look better, and feel better, we'd be pleased to send you the name of our nearest distributor, who can supply you with the samples. New York & Pennsylvania Co., 230 Park Ave., New York 17, New York.

**New York and Penn**  
*Pulp and Paper Manufacturers*

Super • English Finish • Eggshell • English Finish Litho • Offset • Music • Bond • Tablet • Duplicator • Mimeograph • Drawing

## Equipment, Supplies, Bulletins



### Hand Dispenser Introduced

Kleen-Stik Products, Inc., Chicago, is marketing a new, low cost plastic hand dispenser for applying Kleen-



Stik pressure-sensitive roll labels. The dispenser measures  $4 \times 4\frac{1}{4} \times 4\frac{3}{4}$ " and can be used in the hand or attached to tables or other working surfaces through a  $\frac{3}{16}$ " hole provided in the base.

The new dispenser separates Kleen-Stik labels from their backing paper one at a time. Unwinding of the roll is arranged to expose the label before actual separation. According to the company, this enables the user to hand stamp or write in price or other information if desired.

### Awards For ATF Brochures

American Type Founders Co., Inc.'s brochures depicting the new Craw Clarendon and the Craw Clarendon Book type faces, and the covering envelope for the latter as well, all received Special Merit awards at the Exhibition of Printing, conducted by the New York Employing Printers Association during Printing Week at the Commodore Hotel in New York.

A jury of 10 selected the award winners from among thousands of entries submitted for consideration. Both Craw Clarendon and Craw Clar-

endon Book type faces were introduced by ATF during the latter part of 1956.

### Potdevin To Display Machines

Potdevin Machine Co., Teterboro, N. J., will display its line of coating, gluing and labeling machines at the 1957 National Packaging Exposition in Chicago, April 8-11. The Potdevin machines will feature a wide diversification of materials that can be coated, from very thin paper to sheets and webs of paper, cloth, cardboard and other flexible or rigid materials.

### Brown Lists New Cabinet

The W. A. Brown Manufacturing Co., Chicago, has developed a new film storage cabinet. The new unit formerly was made only upon order, but it now will be manufactured as standard equipment.

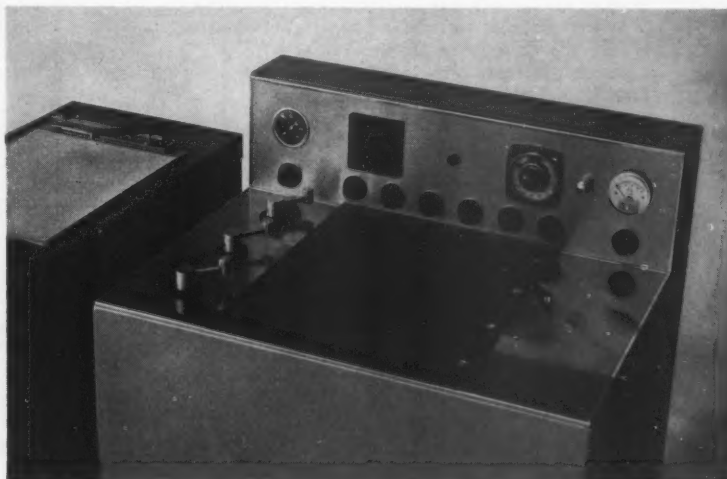
The cabinet features a 24" trimmer knife mounted on top with a convenient side arm shelf under the cutting edge. The cabinet contains four drawers designed to seal out light from film up to 24". A lower area offers a large storage compartment for film in boxes.

### Color Separator Announced

The Colorsplitter, a new product of ROLOC, Inc., 4217 West North Ave., Milwaukee, has been designed to speed production of color separation negatives, masks and positives. According to the company, the new machine eliminates many registry problems and makes separation negatives and color correction masks from color transparencies through the con-

tact printing method.

Transparencies varying in size from  $2\frac{1}{4} \times 2\frac{1}{4}$ " to  $11 \times 14$ " can be separated with the Colorsplitter, but since it is designed to operate as a contact color separator, enlargements of transparencies cannot be made with it. A colorsplitter can be set to separate colors from thin transparencies to the most dense, fully correcting the colors, the firm said.

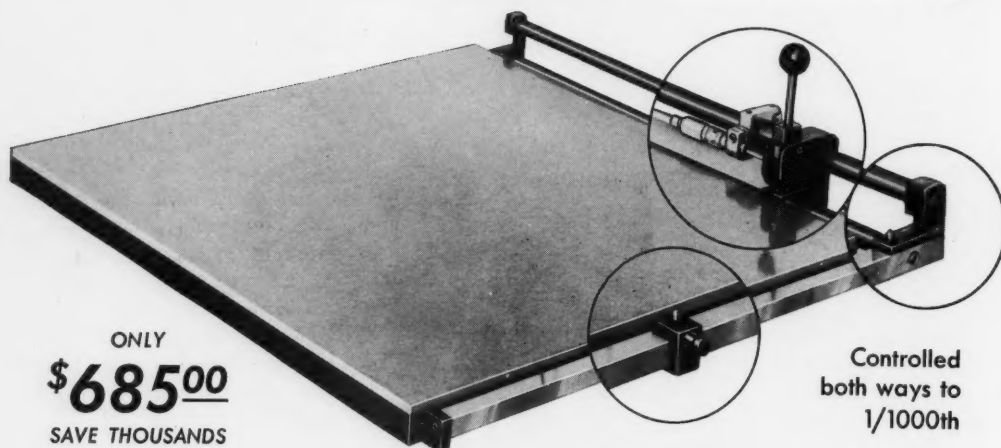


New machine for color separation negatives, masks and positives.



**Chesley F. Carlson**

## Controlled Accuracy



ONLY  
**\$685<sup>00</sup>**  
SAVE THOUSANDS

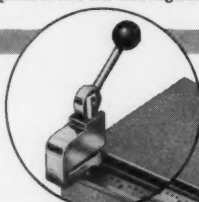
Controlled  
both ways to  
1/1000th

### THE CARLSON PHOTO-COMPOSING SPACER.

Accurate to 1/1000th, this Carlson Photo-Composing Spacer does the work of machines costing thousands in stepping multiple negatives or on plates. Utilizing this proven, accurate punch-and-hole system with micrometer control, the Carlson Spacer operates at 4-times the speed of hand stepping—while maintaining perfect dot-for-dot register. Write for full details.

### THE CARLSON STEP-AND-REPEAT PUNCH

This is practical equipment for the smaller lithographer. Although this is a fine precision-made, all-steel punch which steps with hair-line accuracy, it costs only a few dollars. The Carlson Punch utilizes our proven punch-and-hole system. It provides lock screw setting of three point optical finder, 24" etched stainless steel rule and self-aligning throat-stop for controlled accuracy with Carlson Master Strips. Write for details.



ONLY  
**\$79<sup>50</sup>**

NOTE: Any time within 18 months after purchasing a Carlson Step-and-Repeat Punch, you may trade it in at full price on a Carlson Photo-Composing Spacer.

# Chesley F. Carlson Company

BEN FRANKLIN BUILDING • MINNEAPOLIS 15, MINNESOTA



### Blanket Hardener By Rogers

The Harry H. Rogers Co., Chicago, last month announced a new product, Rogersol JK-162 blanket hardener, which was designed to seal and surface-harden rubber blankets. According to the manufacturer, the new product eliminates tack, especially on coated stock which may curl or pick. Rogersol JK-162 also may be applied locally to the screen area to eliminate slur or spread of dot following or alongside solid area.

### ATF Introduces New Faces

Murray Hill Bold, a new and heavier weight companion face for Murray Hill, has been introduced by American Type Founders. According to Jan van der Ploeg, ATF's type division sales manager, both faces are cut in a contemporary style of informal hand lettering without using a special body structure such as an angle or wing body. Both faces are cast on a regular square body.

### New Digest In Publication

The Graphic Arts Young Executives Association of Milwaukee has inaugurated a monthly "review" type publication, *Graphic Arts Digest*. The four-page publication reviews various articles appearing in different graphic arts publications.

### Crescent Announces New Ink

A new ink, suited to both gravure and flexography, has been announced by Crescent Ink & Color Co., of Philadelphia, Milwaukee, and Atlanta. The ink, Rotoflex, requires only use of the proper vehicle for the process to give exceptional results, according to the company.

Rotoflex is said to be equally useful for polyethylene, Saran-coated Cellophane, Mylar, P-T Cellophane, regular moisture-proof grades of Cellophane, acetate, glassine, foil, and paper.

### GAES Offers Personnel Bulletin

The Fifth Anniversary Bulletin of Available Personnel is being distributed by the Graphic Arts Employment Service, Cincinnati. Originally the Graphic Arts Employment Service

limited its service to key personnel in the graphic arts industry. Two years ago it extended its service to include skilled production personnel. Within the last year it has set up a department to handle personnel for the fast growing packaging industry.

### New All Metal Camera

Robertson Photo-mechanix, Inc., Chicago, recently announced production of the newest addition to its metal camera line. The new, all metal camera, "480," is available in both 24" and 31" sizes. The "480" supplants the wooden model CD and CEH series, but will be offered in the same price range.

### Ink-Solv "30" Announced

A new ink product, Ink-Solv "30," a patented deep-cleaning, low sudsing solvent has been announced by Schultz Laboratories, 823 Arden St., Boone, Iowa. According to the firm, the cold cream base of the powdered hand soap prevents skin irritation, chapping or dermatitis.

### Miehle Issues New Brochure

Miehle Printing Press & Mfg. Co., Chicago, last month issued a colorful three-fold specification brochure. The illustrated piece, done offset, lists Miehle offset presses in the 29, 36, 38, 41 and 49" sizes.



**COMPARE THE PERFORMANCE AND COST!**

**SIZES**

- 18 x 22
- 24 x 24
- 31 x 31



**THE Commodore**  
18x22"... **\$2350.00**  
CRATED F. O. B. WOODSTOCK, ILLINOIS

**PRICE INCLUDES THESE FEATURES:**

- 10 ft. Bi-rail track with center tube
- 24 x 36" glass covered tilting type copyboard
- Goerz Red Dot 16 1/2" Artar, Lens-Coated and color corrected (2 times enlargement and 4 times reduction)
- Lamp carriers and lamps
- Vacuum film holder (swing type) with film size selector valve including pump and motor unit
- Ground glass (swing type)
- Scaling system
- Manual diaphragm control
- Automatic shutter control

**Write today for descriptive literature**



**DEALERS IN ALL PRINCIPAL CITIES**



**W.A. BROWN MANUFACTURING COMPANY**  
608 S. Dearborn St. • Chicago 5, Illinois

**Have you tried?**

**New**

## **MODIFIED PLASTIC JET SPEED INKS**

**LETTERPRESS • OFFSET**

### **FOR COATED PAPER:**

Instantaneous setting, fast drying, high finish, non-crystallizing, fights water, eliminates sprays on most coated papers and gives up to 25% greater mileage.

## **CHELSPEED INKS**

### **FOR UNCOATED PAPERS:**

Similar formulation but corrected to compensate for lack of coating on paper. Fast setting, easier handling, fights water and gives greater mileage than conventional inks.

## **TRI-DIMENSIONAL INKS**

The popular Tri-Dimensional Ink has now been formulated in JET SPEED vehicles and is available either for the LETTERPRESS or OFFSET process.

## **NOMARFIX No. 643**

NOMARFIX is one of the finest products developed by our company for use as a non-scratch, non-scuff, and non-mar additive. We undertook the development of this product as a result of the inadequacies and shortcomings of the many additives being used up to this time.

NOMARFIX is the only product of its kind on the market today. Inks containing NOMARFIX may be overprinted, whereas inks containing wax lose adherence in overprinting, and when dry will scratch and scuff.

NOMARFIX is perfectly safe to use in Process inks, Carton Inks, Label Inks and any other inks requiring the properties of this product.

NOMARFIX will not shorten inks, as do waxes, nor will it retard drying, because it is neutral from the standpoint of drying and non-drying properties.

NOMARFIX used in Black Inks for halftone work and solids will impart excellent non-scratch properties.

### **HOW TO USE:**

NOMARFIX should be used with discretion as to the amount required. However, a minimum of 1 ounce up to a maximum of 3 ounces to the pound will, in most cases, prove sufficient.

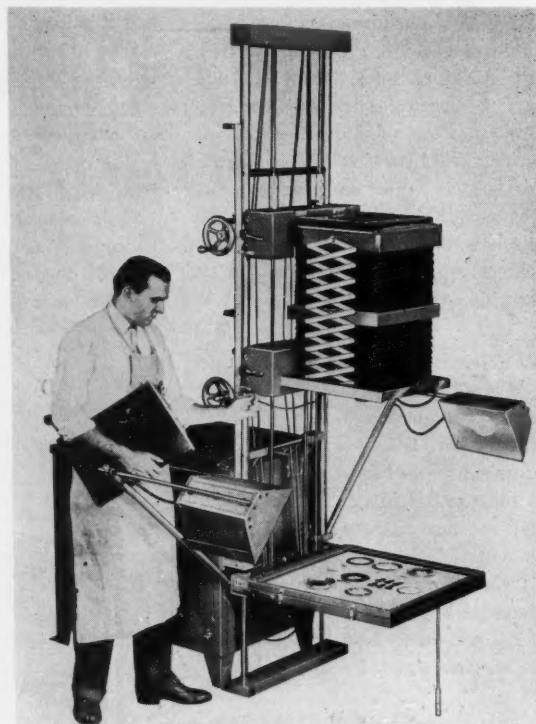
## **SLEIGHT & HELLMUTH, INC.**

154 WEST 18TH STREET, NEW YORK 11, N.Y.

**WATkins 9-6283**

BOSTON	NEW YORK	PHILADELPHIA	BALTIMORE
CLEVELAND	CHICAGO	MILWAUKEE	
MINNEAPOLIS	ST. LOUIS	DES MOINES	
KANSAS CITY	DENVER	FORT WORTH	
PHOENIX	LOS ANGELES		

## **Camera Features Vertical Operation**



Pictured above is the new enlarging, copying and reducing camera manufactured by Burke and James, Inc., Chicago. The ability of the camera to tilt through a full 90 degrees is new in a camera of this type, the company said. Special backs for film accommodation also are featured.

**B**URKE & JAMES, INC., Chicago, is marketing the new Princeton camera, which the firm claims combines the flexibility of a studio stand camera with the operation of a simple copying outfit and the precision of a heavy process camera. Special feature of the camera is its ability to tilt through a full 90 degrees to shoot straight down with its copyholding easel in horizontal position.

Vertical operation is new in a camera of this type. It makes "exploded view" shooting easier for technical manuals, instruction books and sales literature. A ground glass panel is inserted in place of the regular copyboard and parts are arranged on it to be photographed. The panel is illuminated from below, as well as above. Pictures show subject matter in sharp contrast against a clear, white background without need for hand-opaquing of negatives.

In an industrial installation where requirements are limited, the Princeton camera may serve alone as an all-purpose camera for copying, enlarging and reducing, turning out negatives or positives of any size up to 24 x 24". In a printing plant that handles a variety of different processes, the Princeton may serve alongside commercial stand cameras and big process outfits.

There is a complete family of sizes. The two basic

Princeton cameras are 24 x 24" and 17 x 17", but with the aid of special backs they will accommodate film sizes of 19 x 19", 14 x 14", 11 x 14", 8 x 10" and 5 x 7". Each back is provided with a ground glass focusing panel which rests precisely in the film plane. It springs back when a film holder is inserted.

Equipped with a 12" lens and an 8 x 10" back, the camera will enlarge copy four times or reduce it to one-fourth size. Greater degrees of enlargement or reduction can be obtained where desired by using lenses of shorter focal length. Longer lenses, up to 18" focus, are available for making larger negatives from larger originals. Thus the flexibility of the camera is easily expanded.

#### Bachman In 40th Year

Bachman Reproduction Service, New York, is celebrating its 40th year in business. According to Frank E. Bachman, president, the firm was the first letter shop to go into the offset field.

#### Lanston Monophoto Utilizes Monotype Keyboard



A standard Monotype keyboard, as used in plants all over the world, is utilized to perforate the controller paper for the Monophoto. Keyboard operator re-training is unnecessary because procedures are the same as used on hot-metal Monotypes. For the complete story, see page 97.

Compare the Lens you now use with the New GOERZ "RED-DOT" ARTAR  
Now specified by ALL leading Camera manufacturers!



GOERZ

RED  
DOT

ARTAR

The increased demand for better color and black-and-white reproduction has made the new GOERZ "RED-DOT" ARTAR first choice in process lenses. It's fully color-corrected and anti-reflection coated... two "musts" if you strive for the best! An inferior or old-fashioned lens can cause your cameraman serious trouble. An additional focal length will make your camera more versatile. 15-DAY FREE TRIAL! IMMEDIATE DELIVERY. Write us—we may be able to select a lens to fit your present camera calibration.

The Lens with greater covering power  
plus hidden reserves!

The Lens without a peer!

Manufactured only by

C. P. GOERZ AMERICAN OPTICAL COMPANY, INWOOD 96, L.I., N.Y.



REPRO-ART

Robertson

LANSTON MONOTYPE

Focal Length Inches	Film Covered 1:1	Price in Barrel
4	4x5	\$112.00
6	6 1/2 x 8 1/2	133.00
8 1/4	8x12	160.00
9 3/4	10x14	185.00
10 3/4	12x14	196.00
12	12x18	244.00
14	18x20	280.00
18 1/4	18x22	298.00
19	20x24	315.00
26	25x27	425.00
30	30x40	635.00
36	36x45	875.00
42	48x56	1060.00
47 1/4	48x64	1310.00
70	72x80	On Req.

Consolidated

ATF

Wesell

MULLER-TRUBEN G

KEMART

RUTHERFORD

KENRO GRAPHICS

GELB

**Next Month:  
Special LNA Issue**

**METAL DECORATING**  
(Continued from Page 60)

there be close cooperation between ink maker and metal decorator. In their efforts to develop and maintain uniform quality control, lithographers and printers alike must be sure that the inks they require are capable of

the desired performance characteristics and that the standards established can be maintained from one lot to the next. It is essential that wherever possible, these limits of tolerance be worked out very carefully, since it is as much of a problem to be able to reproduce an end result from one run to the next as it is to obtain a specific result. Operating conditions should always be spelled out in precise detail, in order that the ink maker may understand what is required of his product. New raw materials for

printing inks coming into the field constantly will certainly permit improvements in the quality of printing inks for any and all metal decorating requirements. As in the past, however, careful interpretation of these requirements from printer to ink maker is a prerequisite to progress in a gradual improvement in printing quality through improved ink formulations. ★

**KEEPING PACE**  
(Continued from Page 54)

Elgrama can produce line engravings. There is no electronic engraver that will engrave a combination plate in one scanning.

So much for direct engraving electronic machines. They have proved of great commercial value in the coarse screen field and now are invading the fine screen field. You should investigate the potential of this development in relation to your market and service.

You should also be interested in the possibility of improvements in offset plates and other offset printing elements that may result in high-speed web presses challenging both letterpress and gravure in production and economy. Experiments in this direction are steadily moving toward commercial realization.

**Phototypesetting**

You should also consider the developments that have taken place in type-setting methods that do not use metal.

The first keyboard-operated machine to produce photographic type composition on a commercial basis was the *Fotosetter*, manufactured by Intertype Corporation. It uses a unique camera unit in combination with the familiar and time-tested principle of the circulating matrix. The *Fotosetter* is a forerunner of other, more radical, phototypesetting machines—some well advanced, some in the early processes of development, and others that probably are years away.

The *Monophoto*—developed by the Monotype Corporation, of England, and distributed on this side of



**...you'll print  
FASTER • BETTER • AT LOWER COST  
with a HESS & BARKER**

**WEB-FED  
OFFSET PRESS**

- 1 to 4 colors
- 
- 800' per minute
- 
- All roller adjustments quickly and easily made
- 
- Running register control
- 
- Print coated stock; book papers; newsprint
- 
- Accurate ink and water control at ALL times
- 
- Use any type offset plate

**WEB-FED  
PERFECTING LETTERPRESS**

- 1 to 6 colors
- 
- 800' per minute
- 
- Better accessibility greatly reduces makeready time
- 
- 100% hairline register at high or low speeds
- 
- Print coated or uncoated stock
- 
- Perfect ink distribution—ALWAYS
- 
- Use stereotypes, electrotypes, or rubber plates

**HESS & BARKER**

930 WASHINGTON AVE. — PHILADELPHIA 47, PA.

HOward 7-1121



the Atlantic by the Lanston Industries — is a phototypesetting machine that is like the Monotype casting machine except that it utilizes a camera unit in place of the metal-casting assembly.

*The Photon* — developed by the Graphic Arts Research Foundation — is a combination phototypesetting and photocomposing machine. It consists of three units: a typewriter console, a relay rack and a photographic unit. The typewriter console contains a standard electric typewriter, labeled push buttons, lever controls, copyholder and the "makeup elimination panel." The relay rack, directly to the left of the operator, contains additional controls for special types of composition. The photographic unit is located behind the operator, thus forming a U-shaped arrangement. Tape operation is an optional feature of the Photon.

A completely different approach to phototypesetting has been taken by the Mergenthaler Linotype Co. in its *Linofilm*.

The machine consists of a keyboard and a photographic unit. At the keyboard the operator prepares a perforated paper tape containing all the information necessary for the fully automatic operation of the photographic unit.

It is not likely that you would accept any of the three phototypesetting machines without reservations. You may want to wait until these and other machines have proved their usefulness by actually operating in a number of plants under many varying conditions over a period of time. But this is not to suggest that you do sit back at your desk and forget about it. Progressive management has got to devote time to the study of changes not only with respect to things that are obvious but also to the changes likely to occur.

You should know that there are exceptions to the general hesitancy about the use of phototypesetters. There are 60 companies operating extensive installations of Fotosetters — and they have these machines because of certain advantages not offered by the conventional metal-casting machines. These advantages are:

1. *Space saving.* With phototypesetting you can keep any job alive by placing the film in a job jacket in a file cabinet. The saving of space, ease of handling, and elimination of an idle capital investment are very attractive.

2. *Time — and money saving.* Either negative or positive film is immediately available for platemaking, and a range of type sizes from 4 to 36 point is available directly from the machine in two magazines instead of the 10 or more magazines for conventional type casting.

3. *Better results.* The composition on film can be blown up to two inches or larger in a conventional enlarger. The type retains its sharp-

ness and needs no retouching.

Generally we find by experience that every type of machine has its limitations and this is true of the three phototypesetting machines we have just talked about. The equivalent of a Ludlow was needed to phototypeset headings as well as text. Four companies now are providing such machines to complete the system of photo-composition. These machines are the *Protype*, a product of Davidson Corporation, subsidiary of Mergenthaler Linotype Co.; the *Filmotype*, manufactured by the Filmotype Corporation; the *Tyro*, produced by the Halber Corporation; and the *Headliner*, a creation of the Vari-Typer Corporation, a subsidiary of



**NEW dampening  
roller...cover**

**CUTS dampening  
materials cost 50%**

**DISPOSABLE "DIS-COVER"\***  
**easy as putting on stockings**

The DIS-COVER is designed to collect the press ink which causes frequent changing of expensive molletons or turkish towel type dampening materials. With a DIS-COVER, molletons have run up to *thirty* weeks without washing or replacing.

DIS-COVER is easy to apply. Five minutes to slip on the roller

DIS-COVER makes color changes easy. A new, clean cover costs less than washing a roller.

DIS-COVER prevents molleton lint from reaching the plate. Lint free.

DIS-COVER means less water — less ink emulsification — greater color brilliance.

DIS-COVER's millions of tiny pores deliver moisture evenly, regardless of the Dis-Cover's surface condition

AVAILABLE IN "PRE-CUT" SIZES, WITH  
DRAW CORDS, FROM DUPLICATOR  
THROUGH THE LARGEST 76" LITHO PRESS

Write today for full information and prices

\*Trademark registered and patents applied for

DIS-COVER® is manufactured by  
NORMAN A. MACK ASSOCIATES for

**VAN SON**

**HOLLAND INK**

CORPORATION OF AMERICA

MINEOLA, NEW YORK

SOLD COAST TO COAST BY LEADING SUPPLIERS

# SERVICE PLUS QUALITY!

## HAS MADE OUR PLANT THE WORLD'S FINEST

Specializing in  
very fine grains for color  
and process work.



All Sizes ZINC and  
ALUMINUM PLATES  
Ungrained-Grained-Regrained



Lithographic Plate Graining Company  
of America Inc.

35-51 Box Street

Tel. EVergreen 9-4260-4261

Brooklyn 22, N. Y.

# ROGERSOL AC-141

## 1-STEP ROLLER & BLANKET WASH

Try the finest one-step  
wash ever developed!

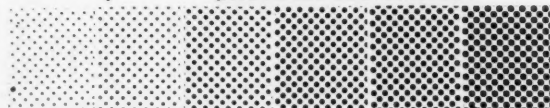
Write for FREE Sample



You need these two aids to lithographers!

*ByChrome*

**SCREEN TINTS**  
priced for one-time use



It is impossible to reproduce the true value and  
quality of ByChrome screen tints by letterpress!

ByChrome Screen Tints are available in both 133-line and  
150-line . . . the only half-tone tints of such quality and wide  
tonal range priced for one-time use. Here's top-quality at  
rock bottom prices.

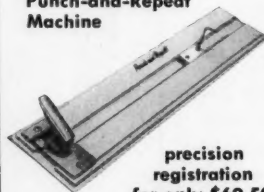
\$50.00 per 1/2 dozen    \$90.00 per dozen    \$10.00 singly  
on 20 x 24/.005 base film

*THE ByChrome*

**PUNCH-AND-REPEAT SYSTEM**

This high-precision step-and-repeat system offers  
the low-cost way to speed production and cut costs.

The ByChrome  
Punch-and-Repeat  
Machine



precision  
registration  
for only \$69.50

ByChrome die-formed  
brass Register Pins



Only \$6.70 per dozen  
for 1/4" size

Write for the name of your authorized ByChrome dealer

*ByChrome*

**COMPANY, INC.**  
Box 1077, Columbus 16, Ohio

the Addressograph-Multigraph Corporation.

It should be pointed out that phototypesetting, at present, fits most readily into lithography, gravure and screen processes; however, a number of projects to adapt it to letterpress are under way.★

## Next Month

*Mr. Rossell concludes his discussion of new graphic arts equipment.*

## PHOTO CLINIC

(Continued from Page 56)

invention of the camera shutter:

PHOTOGRAVURE, Cartwright & MacKay Publishing Co., Inc.

MODERN PHOTOENGRAVING, Flader & Mertle, Modern Photoengraving Pub.

MODERN ILLUSTRATION PROCESSES, Gamble, Pitman Pub. Corp.

ILFORD MANUEL OF PROCESS WORK, Clerc, Ilford, Ltd.

PHOTOGRAPHY & PLATEMAKING FOR PHOTOGRAPHY, Sayre, Lithographic Textbook Pub. Co.

These are but a few of the many similar books available. Many of the film manufacturers publish booklets on the subject of your interest.★

## PRODUCTION CLINIC

(Continued from Page 63)

present this improved appearance would be temporary, for after 5,000 impressions the work would begin to get too sharp and the procedure of softening the ink would commence. This procedure would result in the plate being ruined after approximate 10,000 impressions. It is well to bear in mind that plates run with excess pressure seldom last beyond 10,000 impressions.

Two or three thousandths of an inch extra pressure between plate and blanket would not be sufficient to cause the kind of print shown on the

sheet you submitted. On a job such as this, three thousandths of an inch over pressure would show, but it would not be as bad as your result.

### Plates Refuse Ink

*Question: In storing our casein surface plates we run-off the ink with a number of sheets, wet-wash the plates with vegetable turpentine and put it under asphaltum when wet. We prefer putting on the asphaltum before the gumming in order to avoid that the gum should cover part of the image. When trying to restart the plates month later they refuse to take ink, even after repeated wet-washing with asphaltum; the asphaltum walks off again. When printing we use a dampening fluid containing about two ounces of a 5 percent CMC solution and this has never given any trouble by binding plates when printing, so I do not think this can be the cause.*

E.F., COPENHAGEN, DENMARK

*Answer: Your problem involves one of the basic principles of lithography and I can see that you lack an understanding of the procedure for storing plates to be rerun.*

To start with, the gumming operation is a very important one and should be thoroughly understood. Gum Arabic is hygroscopic and partly insoluble in water. Therefore, when applied to a plate and dried it will stay on the surface of the plate until it wears off due to friction on the press. Being hygroscopic, it will absorb moisture and keep the non-image area of the plate clean when printing. There should always be some Gum Arabic in the fountain solution to replace the film on the plate which is being worn off due to friction. When there is gum in the fountain solution, everytime the press is stopped and the plate dries, a new film of gum is formed to hold moisture and consequently the non-image areas will not ink in and the plate will print clean.

Your problem is caused by lack of protecting the image area before storing the plates for future use. If you use the following procedure, you will eliminate your problem.

1. When the run is completed, instead of running off the ink as you do,

"Using  
**Filmotype\***  
is like having  
1,000 extra  
salesmen



says:  
**Saul Lehman, President, The Georgian Press, Inc., New York City**

\* America's leading photo-composition machine . . . almost instantly produces quality hand lettering and display type.

"Our salesmen are always equipped with the full set of Filmotype lettering catalogs. These include over 1,000 styles and sizes of Filmotype faces. And it's like having 1,000 extra salesmen! We show our customer the all-inclusive selection. He chooses the alphabet he wants. Then in production it's a matter of minutes to insert desired fonts into the Filmotype machine, set the copy and produce proofs perfect for paste-up. Filmotype gets us more printing jobs and more profit per job!"

- Easy operation! Anyone can produce Filmotype proofs.
- Automatic color spacing for exact letter-spacing.
- Desk-top size. Fits on any table or desk. No special facilities needed!

Filmotype catalogs prove that there's a Filmotype alphabet for every printing job . . . alphabets that sell for you!

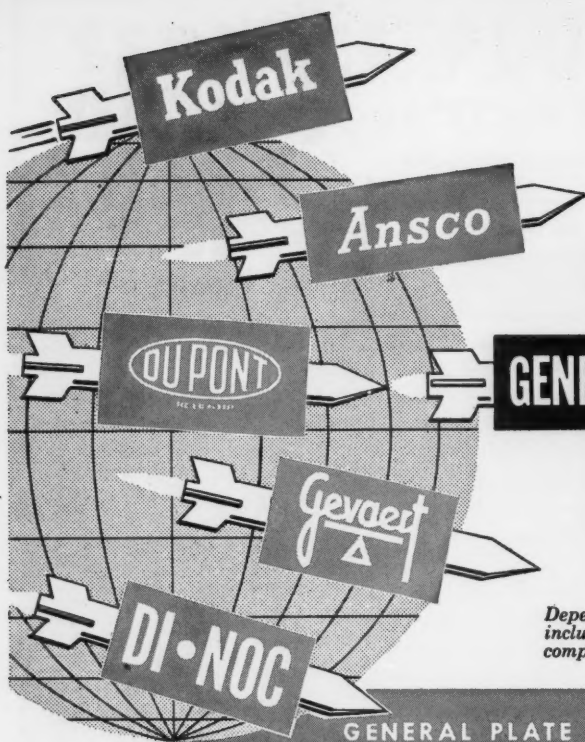


Get complete details . . . mail this coupon

the **FILMOTYPE** corporation DEPT. ML  
7500 McCormick Blvd.  
Skokie, Ill.

- ☐ Send information about the Filmotype Photo Composition Machine and how easy it is to own.
- ☐ Have your representative give me a demonstration right in my own office. I understand there is no obligation.

NAME \_\_\_\_\_  
FIRM \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_



## FASTEST DELIVERY in the INDUSTRY on FILMS and DRY PLATES

**GENERAL** PLATE MAKERS SUPPLY CO.

Complete stocks from our "five famous" film makers... Kodak, DuPont, Di-Noc, Ansco and Gevaert... assure prompt shipment of the exact type and size your order. And our extra-fast deliveries can "save the day" in emergencies. All sensitized goods shipped freight prepaid to your plant (except west of the Rockies).

Depend on General's "SUPER-SPEED on every need", including Klimsch and Robertson Cameras and a complete line of Arc Lamps and Printing Frames.

GENERAL PLATE MAKERS SUPPLY COMPANY

Main Office & Plant: 5441-55 N. KEDZIE AVE., CHICAGO 25

New York Office: 22 E. 17th ST., NEW YORK



## BOUND VOLUMES of MODERN LITHOGRAPHY

(Copies now available for the years 1938-1956)

Are there certain issues of **Modern Lithography** you need to complete your file? Would you like to check on past technical developments? Are there historical facts about the industry you would like to have on hand? The information is all yours in bound volumes of **Modern Lithography**.

A limited supply of bound volumes is available covering the years 1938-1956. Just mark on the coupon the year or years you desire and mail it to Modern Lithography, P.O. Box 31, Caldwell, N. J.

U. S. & Canada \$14.75

Foreign \$16.50

Year: 19....

Payment Enclosed ☐

Send a Bill ☐

Modern Lithography  
Box 31, Caldwell, N. J.

Name .....

Street .....

City ..... Zone..... State.....



**Reading  
ML  
on  
Borrowed  
Time  
?  
Why not  
enter an  
extra  
Subscription  
for your  
plant so  
you'll have  
plenty of time  
to read it  
every month.**

give the plate an extra roll of ink, then dry the plate.

2. When the plate is thoroughly dry, powder the inked image with rosin, using soft cotton.

3. Gum smooth and rub dry with with gum rag (preferably cheese cloth) until there are no streaks in the gummed image.

4. Because the image was covered with a film of ink before gumming you can now wash out the image with turpentine. Be sure that every particle of ink is removed.

5. Coat with asphaltum.

Your plate can now be stored in a dry place until needed.

With this method, the image is protected from gum by ink and the non-image area is protected from ink or dirt by gum.

You were cleansing the image of ink before gumming and the gum adhered to the base lacquer. As gum soaks up water it prevented the image from inking up.

Wet washing would not be effective if there is not a layer of ink between the lacquer and the gum.

As I see it, if you were at all successful on some plates it was because the gum was applied while the asphaltum was still wet and the gum, being water soluble, was wiped off in rubbing it down.★

## TECHNICAL BRIEFS

(Continued from Page 77)

No. 10, October, 1956, p. 92 (1 page). Printability of paper is defined. Defects in paper can affect print quality, but the same print quality can't be expected on papers of different brightness, opacity or smoothness. The papermaker is responsible for packaging paper in a flat condition. The lithographer's responsibility is to keep the paper flat after it reaches his shop. The precautions to be taken are discussed briefly.

**FOUNTAIN DOPE — KNOW WHY YOU'RE TROUBLED BY PICKING OF COATED PAPERS ON MULTI-COLOR PRESSES? HERE ARE THE CAUSES AND FIVE WAYS OF OVERCOMING THE PROBLEM.** John D. Payne. *New England Printer and Lithographer* 19, No. 9, October, 1956, pp. 35-36 (2 pages). The article describes a number of observations made during offset printing in which picking and piling were due to fountain solution softening the paper surface on the paper coating to the extent that subsequent inks would readily remove the softened material from the paper.★



Kleen 'n Krisp for RY-KRISP



IDEA NO. 102

Telling shoppers about the many tasty menus featuring famous RY-KRISP is a b-i-g job. But the ingenious ad staff of RALSTON-PURINA CO., St. Louis, made it easy with this novel die-cut "Smorgas-Board," featuring two inviting "Take-One" recipe pads. And they made it easy for retailers, too, by using four heavy-duty KLEEN-STIK Strips on the back flap to make the display stick tight on shelf or counter! Mighty tasty production job by CONTINENTAL LITHOGRAPHERS, INC., St. Louis.

Outstanding  
**P. O. P. Ideas**  
Featuring the World's Most  
Versatile Self-Sticking Adhesive!

Three Jobs . . . Three Labels



IDEA NO. 103

Building a name . . . displaying product features . . . identifying contents—three different jobs attractively and efficiently handled by KLEEN-STIK Labels, on this sample display box for MERCK & CO., Rahway, N.J., pharmaceutical house! Designed by Merck's BILL POWERS, Gold Foil KLEEN-STIK was chosen for the top label because it "outshone" gold stamping; inside and bottom labels were printed on Kromekote KLEEN-STIK for high visibility. "Terrific trio" by CAMEO DIE & LABEL CO., N.Y.C. All feature famous KLEEN-STIK — so "stickable" on plastic and other hard-to-label surfaces.

Make sure your customers know about KLEEN-STIK — the valuable "extra" that builds extra business for you. Write today for your big free "Idea Kit".

**KLEEN-STIK Products, Inc.**  
Pioneers in Pressure-Sensitives  
for Advertising and Labeling.  
7300 W. Wilson Ave. • Chicago 31, Ill.

Send for BULLETIN M 353

**CAMBRIDGE**  
INSTRUMENTS FOR MEASURING  
MOISTURE CONTENT OF HYGROSCOPIC MATERIALS

PAPER  
HYGROSCOPE  
HYGROSCOPIC RECORDAL  
FOUNDATION DROPS  
for  
Lithographers

MOISTURE  
INDICATOR  
for  
Lithographers, Paper  
 Mills and Converters,  
 Washers, Cans, Sals,  
 Boxes, Cellulose and  
 Cordage Mills

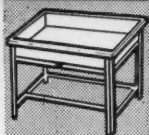
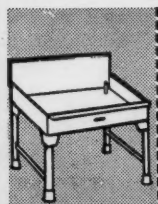
**CAMBRIDGE INSTRUMENT COMPANY, INC.**  
Pioneer Manufacturers of Precision Instruments  
GRAND CENTRAL TERMINAL NEW YORK 17, N. Y.

The CAMBRIDGE PAPER HYGROSCOPE and The CAMBRIDGE PRINTER'S MOISTURE INDICATOR are accurate, quick-acting instruments that should be must equipment for the modern shop doing quality work.

These instruments and their uses are described in Bulletin M353.

**CAMBRIDGE INSTRUMENT CO., INC.**  
3517 Grand Central Terminal, New York 17  
HELPS SOLVE THE REGISTER PROBLEM

Production speeded...quality control improved



with **LEEDAL**

**TYPE 316  
STAINLESS STEEL  
EQUIPMENT  
for GRAPHIC ARTS  
PROCESSING**

**HEAVY DUTY SINKS • TRAYS • PLATE TROUGHS**

CORROSION-RESISTANT • STRONG • ECONOMICAL

LEEDAL — the complete line of top quality stainless steel processing equipment, all scientifically designed for dependable, faster, better work and ease of handling plates and film — thus assuring dividends in production and efficiency in your plant.

Available in a complete size range for every requirement

LEEDAL features • heli-arc welded joints  
• type 316 stainless steel • high lustre satin finish  
(CUSTOM BUILT EQUIPMENT MADE TO ORDER)

SEE YOUR SUPPLY HOUSE REPRESENTATIVE OR  
Write today for your free copy of Bulletin L-55

**LEEDAL** STAINLESS STEEL PRODUCTS, INC.

2929 South Halsted Street • Chicago 8, Illinois

Today's newest  
and finest **INK**

NEVER BEFORE, such quick drying, such long press life and such sharp clean offset printing. . . Here, at last are inks with every fine quality you have wished for. . . Insta-Lith inks deliver RUSH jobs on time, increase profit-making production through long mileage and elimination of down time.



**INSTA-LITH**

**BLACK and COLORS**

Manufactured exclusively by

**Howard Flint  
Ink Co.**

*Gravure • Letterpress • Lithographic • Flexographic*

Detroit • New York • Chicago • Los Angeles • Atlanta • New Orleans • Houston  
Tulsa • Denver • Minneapolis • Indianapolis • Cleveland

**Schultz**

**DEEP ETCH**

**CHEMICALS**

Leading litho plants have been standardizing on Schultz Chemicals for over a decade.



**SCHULTZ  
DEEP ETCH  
CHEMICALS**

1240 W. Morse Ave., Chicago 26, Ill.

## Book Review

**MANUAL OF OFFICE REPRODUCTION** by Irvin A. Herrmann. Published by Office Publications Co., 232 Madison Avenue, New York 16, N. Y. 210 pages. Price: \$3.25.

The publication is a complete manual of office reproduction and duplicating processes and equipment which is a fine guide for office management personnel and an aid to the systems executive. Every type of reproduction process, systems duplicating and im-  
printing method—including photocopying, microfilming, data processing equipment, automatic typewriters and punched tape—with the advantages and limitations of each, is described. Shows how to make the most economical use of whatever duplicating or reproducing equipment an office may now have, how to combine advantages of one process with those of another, when not to use certain methods, and what new equipment might be helpful to existing systems. The manual is worded in clear, non-technical language, with nearly 100 charts, examples and pictures.

While its primary purpose is to help plan reproducing and duplicating operations, the *Manual Of Office Reproduction* helps the executive incorporate into his system the equipment and the methods best suited to his business. Problems faced in setting up such a system are charted and solutions clearly indicated. There is also a comprehensive table noting the advantages and limitations of each process, which allows the reader to see at a glance the most efficient method for a particular task.

The author, Irwin A. Herrmann, is administrator of systems and procedures at Servel, Inc., Evansville, Ind., where he has directed office operations for more than 20 years. Formerly a systems specialist and branch manager for Remington Rand, Inc., Mr. Herrmann was chairman of the organization committee and first president of the Evansville Chapter of National Office Management Assn. He was awarded the NOMA Leffingwell Key in 1949. He is the author of *Office Methods, Systems And Pro-*

*cedures* (Ronald Press), and numerous papers and articles on office management subjects.

*Manual of Office Reproduction* is the third revised and expanded edition of articles first published in *The Office Magazine* in 1946 and 1951. It contains more than 100 pages of informative advertising, and a "Buyer's Guide" to all types of reproduction equipment and supplies.

### Edgar Heads 1958 Committee

Robert M. Edgar, Neyhardt Printing Co., Pittsburgh, has been named chairman of the 1958 International Printing Week Committee by George Wise, president of the International Association of Printing House Craftsmen.

### National Can Names Henschel

George F. Henschel has been appointed vice president and general manager of sales for National Can Corp. Mr. Henschel formerly was general manager of sales for American Can Co. He joined that company in 1930.

## COLOR CHART

(Continued from Page 75)

be of use to just about everyone associated with color printing. Salesmen can use it with their customers. The customer can specify the color in a specific color patch and everyone using the same chart will know exactly what is required.

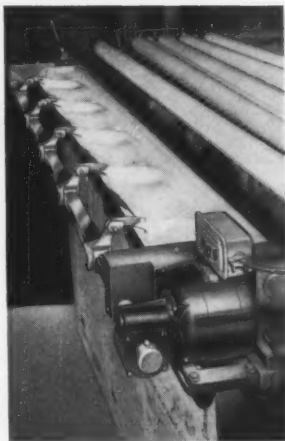
Estimators can use it to determine the number of printings a job will require. It will also show the effect of using different inks or papers so that the most economical way of producing the job can be determined.

The camera department can use the chart to set up masking procedures for a given type of job and for estimating correct dot sizes for key areas in the separations.

Apprentice litho artists can use the chart as an educational aid in estimating the dot sizes required to produce different colors. Journeymen artists will find it helpful to estimate the correct tone values for positives

Do **HEAVY INKS** have you **STIR CRAZY?**

**ortleb agitators...**

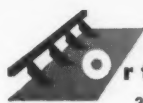


**... assure  
UNIFORMITY  
even with metallic  
and stiff-bodied inks**

Ortleb Agitators can handle any ink problem. Metallic inks cannot settle out. Stiff-bodied inks cannot back away from the rollers.

Ortleb Ink Agitators are real money savers. ... they save on ink, they save on labor, they save on spoilage. A one-time, low-cost investment. They require no maintenance.

Write . . . mention the make and model of your equipment.  
There is an Ortleb Agitator for every press.



**ortleb Machinery Company**

3818 LACLEDE AVENUE • SAINT LOUIS 8, MISSOURI



For the  
finest offset  
reproduction  
from any art...



USE **J&O**  
**COLOR**  
**OFFSET**  
**POSITIVES**

• 817 WEST WASHINGTON BOULEVARD

1898

CHICAGO 7, ILLINOIS, MONROE 6-7080

\* Free Van Gogh print, suitable for framing. Send your name on your company letterhead.

**Schultz**

## DEEP ETCH CHEMICALS

Proved dependable and economical in leading litho plants for more than a decade. You, too, will find it profitable to standardize on Schultz Chemicals for all your deep etch requirements.



**SCHULTZ  
DEEP ETCH  
CHEMICALS**

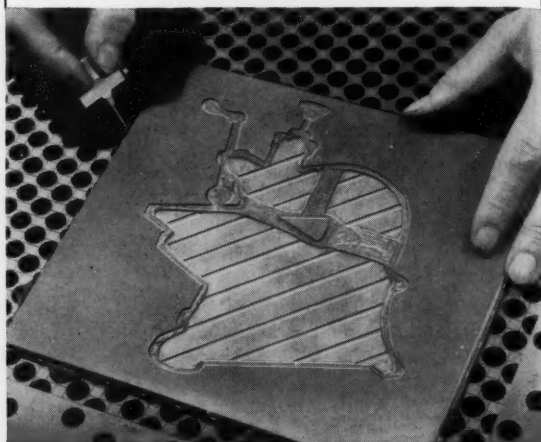
1240 W. Morse Ave., Chicago 26, Ill.



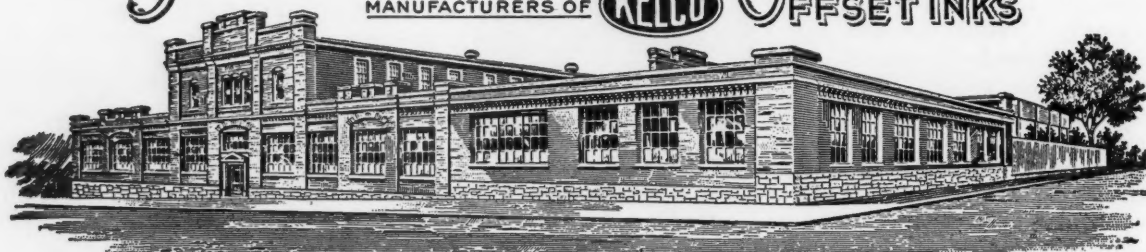
**STERLING  
TOGGLE  
BASE**

Precision ground to give an accuracy unequalled by other methods of machining  
PMC Sterling Toggle Base in magnesium or semi-steel simplifies lock-up—  
saves time—increases profits.

**THE PRINTING MACHINERY CO.**  
436 Commercial Square  
Cincinnati 2, Ohio



**Joseph F. Kelly, Inc.** Saint Louis  
MANUFACTURERS OF **KELCO** **OFFSET INKS**



ST. LOUIS OFFICE AND PLANT • 716 • 728 SIDNEY STREET



when different combinations of inks and papers are to be used, when improved platemaking or press procedures are introduced, and to show the differences in the colors produced by single and multicolor presses, different types of presses and even different pressmen.

Pressmen will find the chart helpful in obtaining color okays and in duplicating the colors printed on the chart in regular production work.★

## SPECKS

(Continued from Page 48)

exactly like the pattern the first time through, but is more understandable. Spray is used overgenerously on top of the print on the first side. When the pile is turned over for the backup, spray globules fall on the unprinted side and prevent the ink from attaching to the paper. The ink attaches in part to the following sheet in the form of offset.

*Influence on Overprinting* — An overgenerous use of spray on a first or second color can prevent a complete trapping of a subsequent color. The fault discloses itself in the form of spots. In the event that the first color down is yellow and the second color is red, the fault will appear in the form of many small yellow spots where the spray bore off the red ink.★

## OPAQUING

(Continued from Page 43)

and thus, to a great degree, prevent the 'building-up' of the opaque. Although the manipulation and control of a pointed brush is difficult, in the hands of an experienced operator it can produce much finer detail work than can the most delicate pen. See adjoining article for a device that will control a fine brush tip.

There is one rather common oversight in the selection of brushes for opaquing purposes. That is their general limitation to the round, pointed, water color type. Actually a large, flat brush such as the sign painter's "Single Stroke," or a round, square-

edge brush such as the show card writer's "Rigger" are extremely useful time savers in covering large areas.

Pens, whether they be ruling pens or artists' drawing pens, apply fluid by means of the split quill principle and tend to leave opaques 'ridged' on the surface of the film, thus preventing perfect contact between the negative and the plate. Of course the artists' pen is limited in its use to the more fluid Red opaque, however it is much easier to control for detail work than is a brush and in many instances the resulting ridging action is not objectionable.★

## FLEXICHROME

(Continued from Page 40)

but was to be turquoise. The art work, with all its mechanical detail shown in the cut-away, could not be used because of the color change. Within a very short time Todd Studios took the art work, and remade the Flexichrome print to the exact match required on the cabinet. The deadline was met and all the

expense in a very detailed piece of art work was saved.

There have been many other problems solved in the St. Louis area, such as conversion of hand lettered logotype in reverse type which the customers had been using in black and white. When he wanted it colored — with the same lettering on a variety of colored backgrounds, a reverse photostat and a copy negative were made from the original black and white art work. Finally a Flexichrome print for each of the colored backgrounds was made.

Beer labels, with all their detail, would take many days work if an artist produced color art work. But Todd took a photostat of original art; placed it on a beer bottle, photographed it and made a Flexichrome print for color reproduction.

Flexichrome process is an Eastman Kodak process that has been on the market for several years and has been in use on both coasts for the last several years. It is currently getting a real work out in St. Louis at Todd Studios.★



*Finest Hydra-Pressed Plastic Sheets*

**VINYL—ACETATE—POLYETHYLENE—BUTYRATE—P.V.C.**

SPLCORP is recommended as the only dimensionally stable substitute for glass, when Stripping Positives or Negatives for Multi Color Work, if close registration is desired. A few advantages enjoyed by the Lithographic Craftsman when using SPLCORP sheets are: Easy Handling, Increased Production, Job Assurance, No Breakage and No Storage Problems.

SPLCORP is manufactured in thickness ranging from .005" to .1", and is available in Transparent, Translucent, or Opaque, with either a Mirror Polished or Matte Finish on one or both sides.

**SCRANTON PLASTIC LAMINATING CORP.**

*Laminating • Press Polishing*

3218 PITTSTON AVENUE    PHONE DI 2-0407. SCRANTON 6, PENNSYLVANIA



use



## lithographic chemicals

The proof of their advantages is in their performance.

- GUM ARABIC FLAKES • ALBUSOL®
- AMMONIUM DICHROMATE PHOTO
- ALBUMEN EGG SCALES • HYPORICE® • PICTOL®
- HYDROQUINONE • PICTONE®
- LITHOTONE® • JIFFIX®

### MALLINCKRODT CHEMICAL WORKS

Mallinckrodt St., St. Louis 7, Mo. • 72 Gold St., New York 8, N. Y.  
CHICAGO • CINCINNATI • CLEVELAND • DETROIT  
LOS ANGELES • PHILADELPHIA • SAN FRANCISCO  
In Canada: Mallinckrodt Chemical Works, Limited — Montreal • Toronto

Send for free catalog and further information today.

## HILL RUBBER CO., INC.

**GOOD YEAR** *Rubber for Printing*

BEST IN RUBBER — BEST IN SERVICE

2728 Elston Ave. • Chicago 47, Illinois  
731 Commonwealth Ave. • Massillon, Ohio  
3510 Gannett St. • Houston 25, Texas  
86 Via Coralla • San Lorenzo, Calif.

**GOOD YEAR**  
**VELVA-TONE**

**OFFSET PRESS BLANKETS**

★ IN CHICAGO STOCK ★

*Supplies for Rubber Printers*

*Prices on Request*

"SERVICE IS OUR BUSINESS"

## NEW MODELS BREAKING ALL RECORDS

**Profit records for YOU . . .**

### NEW FEATURES

**greatest advance in Folder history . . .  
doubling your net profits . . . for instance,**

2 folded signatures (from a single sheet fed into Folder) now come out where one came out before—of course in 1 automatic operation. And . . . from a single sheet fed into the Folder—you can have two separate sheets collated and folded together . . . of course in 1 automatic operation.

Thanks to you for ordering \$50,000,000. of BAUMFOLDERS, volume production keeps prices down . . . even in these days of high labor costs and high material costs, you can still install a 17½ x 22½ Automatic Bindery complete in one compact life-time "Gold-Mine" . . . that folds; cuts; scores; perforates; collates, etc., etc. for only \$85. initial and \$47. a month. It will pay-for-itself many times over before you pay for it. No finance charge . . . just simple interest. And other sizes comparable pay-for-itself terms . . . 14 x 20" or 22 x 28" or 25 x 38" or 31 x 46-60".

## RUSSELL E. BAUM, INC.

615 Chestnut St.

Phila. (6), Pa.

P.S. Someone said—"he benefits humanity who makes two blades of grass grow where one grew before."

MAKERS OF THE  
FINEST QUALITY COLOR PLATES  
FOR  
OFFSET  
LITHOGRAPHY



THE  
STEVENSON  
PHOTO COLOR SEPARATION CO.  
400 PIKE STREET  
CINCINNATI 2, OHIO

## Brevities

VICTOR D. ZIMINSKY, business consultant, has been named a director of R. Hoe & Co., Inc.

ML

EUGENE MOOERS has been appointed sales manager of Rochester Graphic Arts Supply Co., Rochester. He formerly was with Remington Rand Corp. in Buffalo.

ML

FREDERICK G. AUER recently was appointed as a vice president of Champlain Co., Inc., Bloomfield, N. J.

ML

AMERICAN PHOTOENGRAVERS ASSOCIATION will conduct its annual convention and exhibit Oct. 14-16 at the Bellevue Stratford Hotel, Philadelphia.

ML

C. H. GENT, a former president of the Society of Lithographic Artists, Designers, Engravers and Process Workers, London, Eng., died last month.

ML

EDWIN A. ROWLANDS, formerly with Peoples First National Bank & Trust Co., has been appointed the Pittsburgh manager of Layden-Hammell Lithographers, Salem, O.

ML

MARION READING, president of the Capitol Offset and Printing Supply Co., Washington, D. C., has announced that Robert Jones and Thomas Sheridan, Jr. have joined the firm's sales staff.

ML

WILLIAM A. HUSSMAN, 58, personnel manager and building superintendent for the Manz Corp., Chicago lithographers, died in Evanston, Ill., Jan. 20.

ML

PETERSON, HEYNE & PINGREE, Oakland, Cal., lithographers, have added a 30" Harris press, replacing a 17" x 22" Harris.

ML

UARCO, INC., Chicago-based manufacturers of business forms, recently reported net sales of \$8,139,000 for the three months ended Dec. 31, 1956. This represents a 11.4 percent increase over the same 1955 period.

## LOCAL BUYERS GUIDE

**Look for the leading local suppliers in your area here.**

*Advertising rates in the Local Buyer's Guide are: \$7.50 per column inch, maximum 3 inches. Please mail copy and check or money order to Modern Lithography, P. O. Box 31, Caldwell, New Jersey.*

### NEW YORK

**DISTRIBUTORS FOR —  
ST. LAWRENCE LITHO  
COATED PAPERS  
AND  
ST. LAWRENCE OFFSET  
(CARRIED IN STOCK)**

**Cross Siclare & Sons, Inc.  
207 THOMPSON ST., N.Y.C.  
AL 4-9760**

THE SAN FRANCISCO studio of Printing Developments, Inc. held an open house in December for employing photoengravers and printers of the area. Facilities and equipment were demonstrated.

ML

ELLIOTT DONNELLEY, vice chairman R. R. Donnelley & Sons, Chicago, has been elected to membership on the South Side Planning Board Council, a civic group interested in community improvement.

ML

MONTGOMERY PRESS, San Francisco combination plant, has moved to 529 Montgomery St. Owner is Spencer G. Sharp.

ML

LEWIS CLARK THOMPSON, vice president of Champion Paper & Fibre Co., Hamilton, O., has been elected to the executive committee of the board of trustees at Western College, Oxford, O.

ML

CHAMPION INTERNATIONAL Co., Lawrence, Mass., has appointed Melvin L. Peck as sales service director.

**GUARANTEED SERVICE  
MAINTENANCE & REBUILDS  
EQUIPMENT BOUGHT & SOLD  
Complete Plants Moved or Erected**

**CHARLES A. FRENCH & CO.  
WEBENDORFER OFFSET SERVICE**

230 W. 18 St. • Chelsea 3-5143 • New York

"Known for exceptional performance"

### OFFSET PRINTING TO THE TRADE

Long or short runs on sheets up to 42x58. Complete plant facilities. Union label available.

Call GRamercy 7-6100

JOE LOCASCIO

**N. Y. LITHOGRAPHING CORPORATION**  
52 East 19th Street New York 3, N. Y.

**HERBERT P. PASCHEL  
Graphic Arts Consultant**

Methods Analysis

In-plant Training

Trouble-Shooting

Color Correction  
Systems

118 East 28th St.—New York 16, N. Y.

Murray Hill 6-5566

PETER D. NIELSEN, manager of research and engineering at Moore Business Forms' Emeryville, Cal., plant, has been made national manager of printing processes at the company's headquarters at Niagara Falls, N. Y.

ML

FORM LITHOGRAPHING Co., Inc., Topeka, Kan., recently was granted a charter of incorporation. In addition to lithographing, the company manufactures blank books and publishes books.

ML

WARREN M. SLOCUM, veteran paper salesman and assistant manager of sales for the New York & Pennsylvania Co., has announced his retirement from the firm.

ML

SPARTON TYPOGRAPHERS, Oakland, Cal. firm specializing in reproduction proofs, has moved into its new building at 2112 West St. Owners are Grant Munz and James McGlynn.

ML

F. J. DOWLING has been named sales manager of American Can Company's Central division in Chicago.

**THE Luxometer FOR PRECISION EXPOSURES**



The LUXOMETER has no equal! Accept no substitutes with inherent circuit inefficiencies! Some so-called light integrating devices will simulate a complete exposure with the light receiving unit in total darkness. Serving no better than a timer or clock, they defeat the purpose of light integrators. Circuits of this type were discarded by us in 1938.

The light integrator field has been pioneered by us and resulted in direct principles which we have patented and which we protect by United States Patents. The LUXOMETER's exclusive and patented features make it the only light integrating instrument to win the acclaim of Graphic Arts authorities all over the world. Its proven superiority is attested by the great number of users who have reordered, many plants with a LUXOMETER on each camera, photo-composing machine and printing frame.

**A Partial List**

Waters Printing & Litho Co., Racine, Wis.	42
Hartman Card, Inc., Kansas City, Mo.	4
U. S. Army Map Service, Washington, D. C.	12
Map Photoengr., Div. of McCull Corp., Stamford, Conn.	11
Rayner Lithographing Co., Chicago, Ill.	6
Reynolds Corp., Chicago, Ill.	7
Defense Printing Service, Washington, D. C.	13
New Graphic Printing Co. of N. J., Washington, N. J.	4
Consolidated Lithographing Co., Long Island, N. Y.	9
Intaglio Service Corp., New York, N. Y.	12
Bachman Int. of Tech., Rochester, N. Y.	9
Best Engraving Co., Philadelphia, Penna.	6
Graphic Arts, Inc., Philadelphia, Penna.	10
U. S. Govt. Printing Office, Washington, D. C.	7
Ala-Graphics, Hoboken, N. J.	16

We will be glad to send you a LUXOMETER on a free trial basis.

**ELECTRONIC MECHANICAL PRODUCTS CO.**  
Dept. M, 929 Atlantic Ave., Atlantic City, N. J., U. S. A.

**be certain... be sure**  
use **VARN**  
**QUALITY PRODUCTS**

go from **DARK** to **PASTEL** faster with



**CONTAINS HYDROFLEX**

a special ingredient to prevent oxidation and revitalize the rubber.

• **NON TOXIC** • **CONTAINS NO HARSH CHEMICALS**  
Write for complete price list and name of nearest dealer.

**SOLD ON A MONEY BACK GUARANTEE**  
**VARN PRODUCTS CO., INC.**  
26-15 123rd ST. FLUSHING 54, N. Y.

**FREE FLOWING**

CONSISTENCY IN THE INK FOR MORE EVEN COVERAGE ON SOLIDS



**smoother**  
PRINTING PERFORMANCE with  
**EEZY-LITH #10**

- OVERCOME Tackiness in inks or blankets
- BRING ABOUT faster drying
- ELIMINATE PICKING and sticking on coated and card stock
- PREVENT OFFSET

Not to be confused with wax compounds, varnishes or driers. "EEZY-LITH #10" will not change the shade of the ink or harm the rollers, plate or blanket. A definite aid in the running of pre-sensitized plates.

SEND FOR FREE SAMPLE . . . DEPT. ML-3

**ROLL-O-GRAPHIC CORPORATION**  
133 Prince St., New York, N. Y.

**New!** **PRECISION STEP & REPEAT** **New!**  
on stable base film  
**From Any Size Up to 60 x 80**  
Multicolor — Hairline Register

- Precision camera work • Reductions from 60 x 80" to any size • Enlargements to 60 x 80" from any size
- Fast, dependable service

**ROSEN TEXTILE ENGRAVING CORP.**  
2 South Bridge Dr., Agawam, Mass.

**FAST, EFFICIENT DRYERS**  
for  
**WEB-OFFSET**

\*Speed \*Production \*Economy  
Dryer Specialist for over 25 years

**B. OFFEN & CO.**  
168 N. Michigan Ave., Chicago, Ill.



## CLASSIFIED ADVERTISING

All classified advertisements are charged for at the rate of ten cents per word, \$2.00 minimum, except those of individuals seeking employment, where the rate is five cents per word, \$1.00 minimum. One column ads in a ruled box, \$10.00 per column inch. Check or money order must accompany order for classified advertisements. Address replies to Classified Advertisements with Box Number, care of Modern Lithography, Box 31, Caldwell, N. J.

### HELP WANTED:

**TOP NOTCH LITHO ARTIST** needed for plant in Miami, Florida. Permanent. Must be familiar with latest and fastest methods. Address Box 235, c/o Modern Lithography.

**OFFSET PRESSMAN** for medium sized shop 14 x 20 Webendorfer, Camera Experience helpful, Union shop, Central Indiana. Good opportunity. Address Box 236, c/o Modern Lithography.

**OFFSET PRESSMAN.** Experienced in running 25 x 38 Miehle. Top quality work. New York City. Replies confidential. Address Box 237, c/o Modern Lithography.

**SALESMAN — PRINTING & LITHOGRAPHIC INKS** A desirable opening in our metropolitan New York and North New Jersey territory for an alert, ambitious young man, preferably with some knowledge of the various printing processes. An opportunity to progress rapidly with a very successful, long established company operating numerous manufacturing plants. Address Box 238, c/o Modern Lithography.

### LOOKING FOR A NEW JOB?

Superintendent—Gravure EAST \$8,000-\$10,000  
Working Foreman—Offset Pressroom (2) MIDWEST to \$7,000  
Foreman—Offset Pressroom SOUTH \$7,500  
Production Men (6) Offset and/or Letterpress MIDWEST to \$6,500  
Label Designer—Artist MIDWEST \$7,500  
Salesmen — all branches of graphic arts — Printing, Bus. Forms, Supplies, Ink Cartons, etc.

**WANTED:** Cameramen, platemakers, strippers, pressmen, compositors, proofreaders, monotype, folder operators, binderymen, etc. Offset pressmen in high demand.

**GRAPHIC ARTS EMPLOYMENT SERVICE**  
Helen M. Winters, Mgr.  
Dept. M-3, 307 E. 4th Street  
Cincinnati 2, Ohio

List Your Confidential Application With Us

Want a good man? . . . or a good job?

Looking for something to buy?

Run a classified ad . . . in the pages of MODERN LITHOGRAPHY.

### SITUATIONS WANTED:

**WANTED:** A progressive lithographer who is looking for a technical specialist to assume responsibility for plant improvement in methods, standards and control, with emphasis on color. Box 229 c/o Modern Lithography.

**TECHNICAL SPECIALIST:** With outstanding record of achievement as technical advisor. A unique background of practical experience in lithographic production, trouble-shooting and trade training. Interested in responsible position with progressive plant involving technical supervision and in-plant training. Would also consider commensurate position with supplier or equipment manufacturer. Address Box 230, c/o Modern Lithography.

**OFFSET PRESSMAN** with supervisory potentials desires position as foreman in a medium sized plant operating single and 2 color presses, located in or near Philadelphia. Address Box 231, c/o Modern Lithography.

**PREMIUM DOTETCHER** is looking for a job on the West Coast. Thoroughly experienced in first class more color process work and masking methods, have been working over 20 years in fine printing house from which 6½ years management in camera, engraving and color proof department. Would be interested in medium sized progressive printing house, doing fine quality color work in where opportunity exist. Address Box 232 c/o Modern Lithography.

### SITUATION WANTED

Printers and lithographic artist 17 years experience. Designs, Working drawings, lettering, etchings and all media. With 7 years administrative and sales experience. immigrating to U.S.A. Address ADN 53 C.N.A., Commissioner Street, Johannesburg, South Africa.

Self Spraying



**STATIKIL**  
PRESS BUTTON TRADE MARK  
AND SPRAY REG. IN U. S. PAT. OFF.  
**STOP STATIC ELECTRICITY**  
\$3 PER CAN \$30 PER DOZEN  
The Original The Only  
**STATIKIL**  
1220 W. 6th St., Cleveland 13, Ohio

### you've tried the rest, now try the best . . . NEW universal GRAY CONTACT SCREENS

A NEW, IMPROVED CONTACT SCREEN — USED INTERCHANGEABLY FOR SUPERIOR LITHO AND ENGRAVING HALFTONES.

RULINGS PER IN.:  
32, 45, 55, 60, 65, 75, 85, 100, 120, 133, 150, 175 — SIZES: 8 x 10 TO 22 x 23 IN.  
Angle-ruled screens to 19 x 23 in.

Write for price list and descriptive folder  
**CAPROCK DEVELOPMENTS**  
165 Broadway, N. Y. 6, N. Y. REctor 2-4028

**PLANT MANAGER or PRODUCTION EXECUTIVE.** At present production superintendent of a large 3 A shop. Have background in costs-sales-production. Would like a challenge with a little smaller shop. Am in middle 30's with a family. Would like the Midwest or West Coast. Address Box 233, c/o Modern Lithography.

### FOR SALE:

**GRAINING MACHINES:** Two Zenith graining machines. Original owner, used only on a single shift basis in a lithographic plant. Not a trade graining operation. 65 x 150 Serial A 996—1950  
82 x 101 Serial A 697—1937  
50x x80 Zenith Electric Dryer  
May be seen in operation. Will be available 1st of May, 1957. Principals only. Address "Graining" Box 239 c/o Modern Lithography.

**FOR SALE:** Fuchs & Lang Offset Hand Proof Press Plate Size 30 x 22½. Price reasonable. Write Box 240, c/o Modern Lithography.

22 x 34 Model S-5L Harris Single-Color Offset Press, DC Equipment. Can be seen in operation. Need space. Will accept offer. Address Box 241, c/o Modern Lithography.

### EQUIPMENT WANTED:

Wanted—Projection Machine for Posters—Box 242, c/o Modern Lithography.

Wanted: (2) Two hand transfer Presses, stone size 24 x 30. James H. Hunt, S. W. Station, Washington, D. C.

Will purchase good used OXY-DRY Spray. Advise size and price. Progress Litho, Cincinnati 37, Ohio

### Own a LUXOMETER

Find out from your dealer about the Lease Purchase plan to own a LUXOMETER. Free trial offer on your equipment — no obligation to purchase — no capital investment.

**SHORT RUN PUBLICATIONS BY OFFSET**—will organize a Publication Shop or department; train key employees to produce publications and other work from manuscript copy to finished product. Hot metal, cold-type, or photographic typesetting coupled with modern camera, stripping, and platemaking techniques and high speed, quick-change roll-fed offset. Tape operation or geared vernier controls where suited. A manufacturing approach applied to short run work. Salary or fee basis. Address Box 234, c/o Modern Lithography.

### OFFSET PRESSES

Available for Inspection—Details on Request

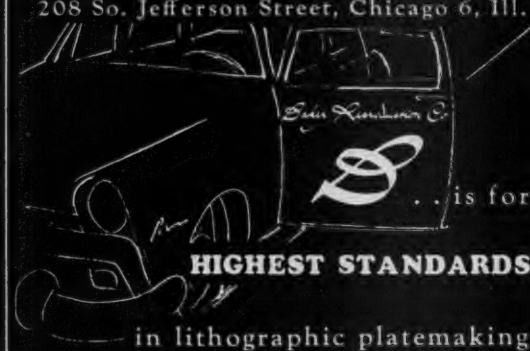
**HARRIS:** 34 x 45 2-Col. Model LST  
26 x 40 2-Col. Model LSR  
22 x 34 1-Col. Model EL  
21 28 1-Col. Model LTC  
17½ x 22 Model LTG

**A.T.F.:** DE 17½ x 22½ Chief; two 14 x 20  
EBCO: 22 x 34

**MIEHLE:** No. 69, 2-Col. Sheet-Size 46½ x 67½ Pile Feeder & Delivery

**NORTHERN MACHINE WORKS**  
323 North Fourth Street  
Philadelphia, Penna.  
Market 7-3809

208 So. Jefferson Street, Chicago 6, Ill.



**HIGHEST STANDARDS**  
in lithographic platemaking

**W.D. WILSON**  
PRINTING INK COMPANY LTD.  
*Fine Printing Inks*  
LETTERPRESS  LITHOGRAPHY  
Est. 1865  
5-38 46th AVE., LONG ISLAND CITY, N. Y.  
TEL.: STILLWELL 4-8432

**Efficiency Approved**  
**A Film**  
**Scribing Tool**  
scientifically designed for  
**Ruling Negatives**



**Litho Ruled Forms - QUICKER - EASIER - BETTER**  
★ Perfect uniformity of rules — no film spoilage.  
★ 6 cutting heads in set: 4 for single rules from hairline to 1-point rules; 2 cutting heads for double rules.  
A postcard will bring descriptive literature

*Scriber Specialties*  
1729 East 4th St. DULUTH, MINNESOTA

**COMPLETE INSTRUCTION IN**  
**PHOTO OFFSET**

**Become a CAMERAMAN, STRIPPER or PRESSMAN**  
Black & Color • Platemaking • Harris  
Webendorfer • Multilith • Davidson  
Also **SATURDAY CLASSES** Open 8 a.m. to 10 p.m.  
Choose Your Hours! Attend as Long As You Like!

**MANHATTAN**  
SCHOOLS OF **PRINTING**  
72 Warren St. (at Chambers) N.Y.C.  
WORTH 2-4330  
Two Minutes Walk from City Hall

**DRY PLATES**  
**FILM**  
**PHOTO CHEMICALS**

Lenses, Contact Screens  
and accessories for the camera  
and darkroom

**K. SCHLANGER CO.**  
333 West Van Buren St., Chicago 7, Ill.  
WEBSTER 7540


**DOT ETCH PROCESS**  
**Color Plates**

**PROMPT SERVICE**  
**HALFTONE NEGATIVES & POSITIVES**  
**DEEP ETCH PRESS PLATES**

**ZARWELL & BECKER**  
*Offset Platemakers*  
223 N. WATER STREET •  
MILWAUKEE 2, WIS.

*For Best Quality*

**HUMIDITY**  
**PROOF!**



**GRUMBACHER**  
**PATENT BLACK**  
**MASKING INK**

- adheres to acetate and vinyl
- extra black... extra opaque
- non-reflective high gloss
- for masking, overlays, drawings
- use on paper, cloth or plastic

**NEVER TACKY... EVEN IN HUMID WEATHER... ALWAYS READY TO USE**  
• use with pen, brush or ruling pen  
• thins with water... washes off without staining the acetate

SEND FOR FREE SAMPLE JAR  
**M. GRUMBACHER**  
INC.  
477 W. 33rd St.  
New York 1, N. Y.

**STATIC!**



The SIMCO "Midget" is guaranteed the most effective, least expensive static eliminator available. Send for free literature today!

**the SIMCO company**  
920 Walnut Street, Lansdale, Pa.

**FOR A REAL DEAL, CALL O'NEILL!**

**FOR SALE**

17½ x 22½ ATF CHIEF DE 3791  
17½ x 22½ ATF CHIEF MAC  
22 x 29 ATF BIG CHIEF  
20 x 26 WEBENDORFER OFFSET PRESS  
#2 KELLY, AC MOTORS  
40" SEYBOLD DAYTON PAPER CUTTER  
14 x 22 THOMSON STYLE B  
27 x 41 MIEHLE AUTOMATIC



**FRANK J. O'NEILL**

The Graphic Arts Machinery Specialist  
8 SPRUCE ST. NEW YORK 38, N.Y. BE 3-7425

**E G A**

the **RELIABLE** Supplier  
to the Lithographer

for **SERVICE** call Circle 6-3526  
EASTERN GRAPHIC ARTS SUPPLY CO.  
509 W. 56th ST., New York 19, N. Y.

**new... Eliminator OVERNIGHT Washups!**  
**acrolite INK-O-SAVER**  
stops ink skinning  
in fountains or cans  
● Works instantly. ● Won't affect ink or  
drying time. ● Ask your ink salesman or write:  
**acrolite WEST ORANGE, N. J.**

**FOR SALE**

30 x 36 Hall Offset Proving Press  
25 x 38 Directplate Offset Proving  
Press  
54" Seybold 20th Century Power  
Cutter  
34" Challenge Diamond Power  
Cutter  
Hamblet Sheeters & Layboys  
Cameron Slitters  
Hall Presses & Parts

and many other items

**Thomas W. Hall Co.**

Stamford, Conn.

**Gordon Joins Willoughbys**

A veteran of the graphic arts, William Gordon, last month joined Willoughbys in New York as assistant to Walter Alexander, general sales manager.

Mr. Gordon, who has been in the graphic arts industry for 20 years, served most recently with the Gevaert Co. of America. He formerly had been employed by Eastman Kodak Stores and Bridgeport Engravers Supply Co. For several years he operated his own business, known as Reproduction Equipment & Supply Co., Inc.

**FOR SALE**

61 Miehle 2-color offset press, 42 x 58.  
Serial #20544-45.

Ernest Payne Corporation

82 Beekman Street New York 38, N.Y.  
BEekman 3-1791

**DOT ETCHERS** — We are expanding our color reproduction facilities and need Dot Etchers who are familiar with modern methods of color correction. Our men must be interested in a challenging position in our modern, progressive plant. We offer premium wages and ideal working conditions. Please state qualifications, background and salary required in first letter. Address Box 228, c/o Modern Lithography.

**READING ML**

**ON BORROWED TIME?**

*If you are reading Modern Lithography on borrowed time, as it is routed around the shop, why not make sure you get it first and get to keep it for later use at home in your spare time.*

*You can, simply by subscribing for one year at \$3. And you can save a dollar by sending \$5 for two years. That way, you can take your time reading all the articles and late news every month.*

**LETTERS**

(Continued from Page 29)

it also covers up inaccuracies in the color of the shadows."

I wish Mr. Smith would try to cover color-inaccuracies with black in wet printing.

Further on he suggests that in the "neutral and dark areas" the three primaries should be partially removed and substituted by black. "The black should be a record of the gray components of the original." He does not say what he means by gray component and how to identify its volume and character, also its origin. (He says later that neither yellows nor magentas have gray components). Then: "Even if the other colors are not completely removed (!) where black is printed, a black printer approaching this type is desirable so as to avoid covering up colors in the shadows. (A moment ago he wanted to cover up col-

ors in the 'neutral and dark' areas with black.)

Those of us who work for and see multi-color printing day in, day out, with years of experience, know that the major problem in that work is that the printed image has a tendency to appear flat and lifeless due to the very nature of wet printing in a fast sequence. We also know that the black is always too strong and must be treated with utmost care and economy. Removing color from 'neutral' areas and replacing it with black is sheer murder for the job. Is it possible that our daily experiences are all invalid? If so then would Mr. Smith present some additional evidence to support the validity of his theories in the matter?

In column three of page 74, he suggests that the transparency be masked (two masks) then a negative with .50 to 1.60 density be made for a black printer. Does he realize that such a negative would yield a screen positive with 15 to 85 percent black?

Later on he writes: . . . "if the transparency contains no blue areas, use only green and red filter exposures to produce partial correction in these areas . . ." etc. Presuming that he is still speaking about the black printer, does he intimate that when a transparency does not carry blue detail it has no cyan in it? How could a balanced black printer—even if only a skeleton—be made without any record of the yellow element in the blends?

He seems to think that the blue filter is used only to make all blue details come white in the separations. What about the fact that we use the blue filter to record the yellow element in the image? By omission of the blue filter exposure he intends to eliminate the blue and he does not seem to know that although "there is no blue detail in the transparency" using the red filter he still would have blue elements in the image but the yellow would be missing.

I am sorry to question so many of Mr. Smith's statements, suggestions and expert advice. But with due respect to the author may I request that Mr. Smith kindly elucidate the above points in the hope that by a more thorough understanding of his ideas we all may learn something new and valuable.

Zoltan I. Poharnok  
Lord Baltimore Press  
Baltimore

The articles to which reader Poharnok refers were taken from a talk by R. M. Smith, graphic arts technical representative of Eastman Kodak Co., San Francisco. The talk was given at the Craftsmen convention in Los Angeles last August. ML has forwarded a copy of Mr. Poharnok's letter to Mr. Smith, inviting him to comment on the questions raised by the reader. Any reply from Mr. Smith will appear in this column in a future issue.—Editor.

# PRESSMEN'S INK HANDBOOK

*By H. J. Wolfe*

272 Pages

\$4.50 in U. S. A.  
\$5.00 Foreign

## CONTENTS

### Chapter

1. **Properties of Inks** . . . Review of physical characteristics; general types of inks; steps in manufacture of inks; definition of terms.
2. **Purchasing Printing Inks** . . . Ink requirements and specifications; "doctoring inks"; selecting your supplier; estimating ink consumption for offset work and letterpress; ink coverage chart.
3. **The Private Ink Plant** . . . Analyzing some of the misconceptions as to the advantages of operating your own ink plant; discussion of the "basic ink system."
4. **Manipulation of Ink** . . . Color matching and what the pressman can safely do to "adjust" inks; ink storage, shelf life; additions of reducer, drier, varnish, etc.; improving body.
5. **Inorganic Pigments** . . . Properties and characteristics of pigments as they affect inks; discussions of natural and manufactured mineral pigments; charts showing properties and uses of ten mineral pigments and 18 important inorganic pigments.
6. **Organic Pigments** . . . History, preparation of intermediates; charts showing properties and uses of more than 45 important organic pigments; classification of dyestuffs.
7. **Black Pigments** . . . General discussion; characteristics and manufacture; lampblack; furnace black; thermal decomposition blacks; mineral black; manganese black; graphite; iron oxide black.
8. **Printing Ink Vehicles** . . . Vegetable drying oils; linseed oil and linseed oil varnishes; lithographic varnish; chinawood or tung oil;

### Chapter

- soybean, oiticica oil; vegetable semi-and non-drying oils; alkyd, fish, rosin, fatty acid, mineral oils; pitch varnishes.
9. **Driers and Drying** . . . The six methods of drying; theories of drying; paste driers, japan driers; concentrated driers; cobalt driers.
  10. **Letterpress Inks** . . . Ink classification, specification of stock; job press inks; automatic press ink; flatbed cylinder press inks; web press inks; required properties of the inks; relation of ink to stock; inks for various stocks and their requirements; halftone black inks and process inks.
  11. **Lithographic Ink** . . . Requirements and characteristics are given for lithographic inks; offset printing inks; dry offset printing inks, etc.
  12. **Intaglio Printing Inks** . . . Requirements of inks for intaglio printing; copper plate engraving inks; steel plate engraving inks; stamping inks; photogravure inks; rotogravure inks; classification of rotogravure inks.
  13. **New Types of Inks** . . . Thermosetting inks; synthetic litho inks; hot wax inks; aniline inks; steam-set or moisture set inks; pressure set inks; silk screen inks; metallic inks: water color inks.
  14. **Testing of Inks** . . . Equipment needed; dry color testing for strength; resistance, permanence, particle size, etc.
  15. **Ink Problems and Remedies** . . . Ink difficulties encountered in letterpress and lithographic printing are detailed, listing the symptoms, causes and suggested remedies.
- Glossary**

## TEAR OFF AND MAIL

INDUSTRY PUBLICATIONS  
P. O. BOX 31  
CALDWELL, N. J.

Enclosed is our check for \$4.50 (Foreign and Canada \$5.00). Please send me one copy of the PRESSMEN'S INK HANDBOOK. It is understood that I may return the book within ten days for full refund.

COMPANY .....

ADDRESS .....

BY .....



# INDEX to ADVERTISERS

MARCH, 1957

Aljen Associates .....	Feb.	Hamilton & Son W. C. ....	117	Offen & Co., B. ....	146
American Cyanamid Company .....	109, 110	Hammermill Paper Co. ....	13, 78	Ortleb Machinery Co. ....	141
American Graded Sand Co. ....	Feb.	Handschoy Co., A. E. ....	120	Ortman McCain Co. ....	Nov.
American Type Founders, Inc. ....	24	Hantscho, Co., Inc., George. ....	105	Oxford Paper Co. ....	71, 72
Amsterdam Continental Types & Graphic Equipment Co. ....	123	Harris-Seibold Co. ....	4th Cover	Oxy-Dry Sprayer Corp. ....	76
Anchor Chemical Co. ....	127	Herbert Products .....	Dec.	Paper Manufacturers Co. ....	120
Anasco .....	20	Hess & Barker .....	134	Parsons Paper Co. ....	Feb.
Azoplate Corp. ....	114	Hill Rubber Co., Inc. ....	144	Pitman, Harold M., Co. ....	92
Baker Reproduction Co. ....	148	Hoe, R. & Co. ....	Jan.	Printing Machinery Co., The. ....	142
Baum, Inc., Russell Ernest. ....	144	Holland Ink Corp. ....	135	Rapid Roller Co. ....	Feb.
Beckett Paper Co. ....	Jan.	Howard Paper Co. ....	96	Repro Graphic Machines, Inc. ....	Feb.
Bensing Bros. & Deeney. ....	81	Hunt Co., Philip A. ....	6, 7	Roberts & Porter, Inc. ....	3
Sam'l Bingham's Son Mfg. Co. ....	Feb.	Ideal Roller & Manufacturing Co. ....	85	Robertson Photo-Merchants, Inc. ....	Jan.
Bridgeport Engravers Supply Co. ....	Feb.	Ilford, Inc. ....	88	Rogers Co., The Henry H. ....	136
Brown, W. A. Mfg. Co. ....	131	Interchemical Corp. ....	Dec.	Roll-O-Graphic Corp. ....	146
Buckbee-Mears Co. ....	Feb.	International Paper Co. ....	111, 112	Rosback Co., F. P. ....	119
BqChrome Co., Inc. ....	136	International Press Cleaner & Mfg. Co. ....	Feb.	Rosen Textile Engraving Corp. ....	146
Cambridge Instrument Co., Inc. ....	140	Jahn & Ollier Engraving Co. ....	142	Royal Zenith Corp. ....	Jan.
Cantine Co., Martin. ....	3rd Cover	Jones Graphic Products. ....	Dec.	Rutherford Machinery Co. ....	Dec.
Carlson Co., Chesley F. ....	130	Jomac Products .....	Jan.	Saltzman, J. G., Inc. ....	126
Champion Paper Co. ....	Feb.	J. F. Kelly, Inc. ....	142	Schlanger, K. ....	148
Chemco Photoproducts Co. ....	4, 98	Kimberly-Clark Corp. ....	8, 9	Schmidt, H. & Co. ....	12
Chicago Litho Plate Graining Co. ....	Feb.	Kleen-Stik Products, Inc. ....	139	Schultz, H. J. ....	140, 142
Consolidated Water Power & Paper Co. ....	103	Knox Soap Co. ....	26, 61	Scranton Plastic Laminating Corp. ....	143
Consolidated Int'l Equip. & Supply Co. ....	18, 57, 64, 65	Korn Co., Henry P. ....	Oct.	Senefelder Co., Inc., The. ....	106
Crescent Ink & Color Co. ....	116	Lawson Co., E. P. ....	15	Scriber Specialties .....	148
Curtis Paper Co. ....	Feb.	Leedal Stainless Steel Products, Inc. ....	140	Siebold, J. H. & G. B., Inc. ....	Feb.
Davidson Corp. ....	115	Levey, Fred'k H. Co., Inc. ....	Jan.	Simeco Co. ....	148
Dayton Rubber Corp. ....	Feb.	Litho Chemical & Supply Co. ....	30	Sinclair & Valentine Co. ....	14
Dexter Folder Co. ....	22	Lithographic Plate Graining Co. of America .....	136	Sleight & Hellmuth, Inc. ....	132
DiNoc Co. ....	Feb.	Lithoplate, Inc. ....	23	Strathmore Paper Co. ....	Feb.
du Pont de Nemours & Co., E. L. ....	Feb.	Macbeth Arc Lamp Co. ....	Jan.	St. Regis Paper Co., Gummed Products Div. ....	122
Eastern Corp. ....	19	Mallinckrodt Chemical Works. ....	144	Stevenson Photo Color Separation Co., The .....	144
Eastman Kodak Co. ....	55	Manhattan School of Printing. ....	148	Strong Electric Corp. ....	125
Electronic Mechanical Products Co. ....	146	McLaurin-Angier Co. ....	Dec.	Sullebarger Co., E. F. ....	Jan.
Falulah Paper Co. ....	Feb.	Mead Corp., The. ....	Dec.	Teitelbaum Sons, Inc., N. ....	Feb.
Filmotype Corp. ....	137	Mergenthaler Linotype Co. ....	2nd Cover	Tickle Engineering Works, Inc., Arthur. ....	21
Fitchburg Paper Co. ....	27	Michle Printing Press & Mfg. Co. ....	101, 118	Toledo Lithograph & Plate Co. ....	Feb.
Flint Ink Co., Howard. ....	140	Miller Printing Machinery Co. ....	10	Uniform Graining Corp. ....	Feb.
Fox River Paper Corp. ....	107, 108	Minnesota Mining & Manufacturing Co. ....	69, 70	Varn Products Co., Inc. ....	146
Gaetjens, Berger & Wirth, Inc. ....	104	National Association of Photo- Lithographers .....	94	Vulcan Rubber Products. ....	73, 74
Gegenheimer Co., Wm. ....	Feb.	National Carbon Co., Div. of Union Carbide & Carbon Co. ....	Feb.	Wagner Litho Machinery Div. ....	58
General Plate Makers Supply Co. ....	138	National Steel & Copper Plate Co. ....	Feb.	Warren Co., S. D. ....	90, 91
General Printing Ink Co. ....	Jan.	Neenah Paper Co. ....	83	Wesl Manufacturing Co. ....	113
General Research and Supply Co. ....	Feb.	Nekoosa Edwards Paper Co. ....	11	West Virginia Pulp & Paper Co. ....	Dec.
Gevaert Co. of America, Inc. ....	Dec.	New York & Pennsylvania Co. ....	128	Whitting Plover Paper Co. ....	16, 17
Gilbert Paper Co. ....	25	Northwest Paper Co. ....	67, 68	Willy's Plate Graining Corp. ....	Dec.
Godfrey Roller Co. ....	100	nuArc Co., Inc. ....	Feb.	Wilson Printing Ink Co., W. D. ....	148
Goetz American Optical Co., C. P. ....	133	Nuclear Products Co. ....	Dec.	Winsor & Newton, Inc. ....	Feb.
Goodyear Tire and Rubber Co. ....	Feb.			Young Brothers Co. ....	Feb.
Graphic Arts Corp. of Ohio. ....	Feb.			Zarkin Machine Co., Inc. ....	28
Grumbacher, M., Inc. ....	148			Zarwell & Becker. ....	148
Gurin-Rapport .....	Feb.				

(The advertisers' index has been accurately checked but no responsibility can be assumed for errors or omissions.)

## TALE ENDS

**I**F your pressmen drink too much and get the press sheets and themselves all out of register, help may be on the way. *Science News Letter* reports on an incident in the pressroom of a print shop that may lead to a new "cure" for alcoholism as important as the well-known Antabuse, which causes a severe reaction when the user imbibes, and thus discourages his drinking. In the print shop case, the pressmen complained that drinking was unbearable. Turned out it was an anti-skinning agent in the inks, especially the yellow, which set up violent reactions to alcohol.

The story came to light when the pressmen reported they got blotchy red faces, were drowsy, and short of breath after drinking. . . . You mean that isn't normal?

ML

It will take a lot of hats for the successful salesman in 1957 to get all the business he's after, Walter J. Ash, vice president for sales of Consolidated Lithographing Corp. declared tongue-in-cheek at a re-



cent sales meeting of the New York firm. Some of Mr. Ash's recommendations are these: pith helmet—for determination; high hat—for the white glove treatment; beret—symbolizing the creative ingredi-

ent; and chef's cap—seeking the right recipe for each customer. Mr. Ash said one billion dollars would be spent for point-of-sale material in 1957.

ML

More cities could profitably follow the lead of Kansas City next year when Printing Week rolls around. For this year's celebration, the Graphic Arts Association prepared

and distributed 3500 broadsides entitled "Get Ready for a Greater Tomorrow." The sheets were lithographed in two colors on both sides, and opened up to a 35 x 45" aerial view of downtown Kansas City. Local response enthusiastically acclaimed the novel promotion piece, the Printing Week committee reported.

William R. Brown, president of Chas. E. Brown Printing Co., and S. D. Goller, president of Fine Arts Lithographing Co., were co-chairmen of the committee which handled preparation and distribution of the broadside.

The broadside, well planned and beautifully executed, is a real advertisement for litho as well as for city it boosts. Next year samples of it should be sent to other cities.

## You Have to Concentrate If You Want Real Results



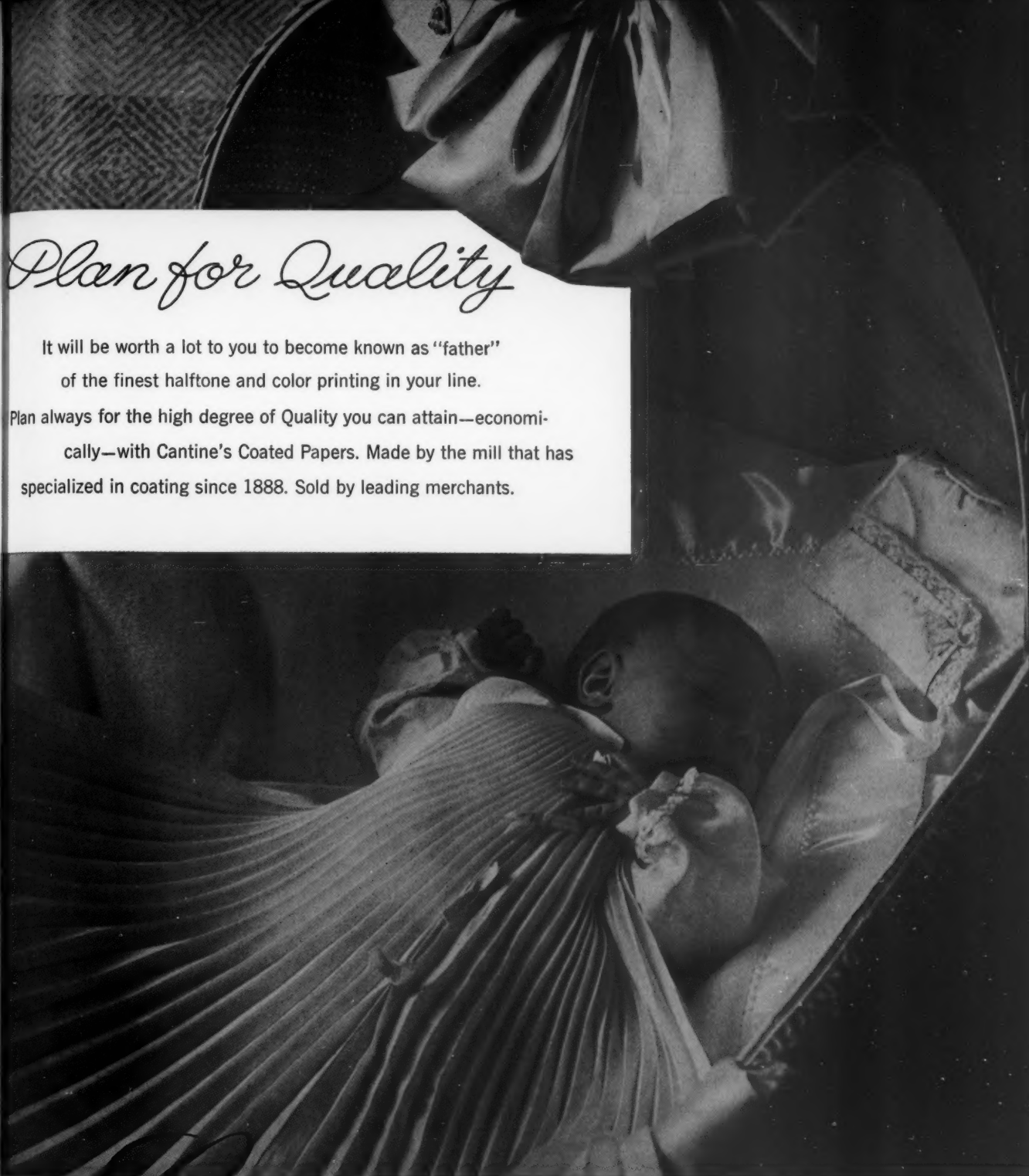
**Y**EP, no matter what you're after in the way of real results—CONCENTRATION is the only way to get it. And, if you want real advertising results, pick the one strong magazine in your field and concentrate your advertising there—where the people who really count will read your sales message month after month. In the litho field, the strongest magazine is, of course,

**MODERN LITHOGRAPHY**

Box 31

Caldwell, N. J.

Member, Audit Bureau of Circulations



## Plan for Quality

It will be worth a lot to you to become known as "father"  
of the finest halftone and color printing in your line.

Plan always for the high degree of Quality you can attain—economically—with Cantine's Coated Papers. Made by the mill that has specialized in coating since 1888. Sold by leading merchants.

*Photo by Walter Sarf*

# Cantine's COATED PAPERS

LETTERPRESS: • HI-ARTS • ASHOKAN  
M-C FOLDING BOOK • M-C FOLDING  
COVER • ZENA • CATSKILL • VELVETONE  
• SOFTONE • ESOPUS TINTS  
ESOPUS POSTCARD

OFFSET-LITHO: • HI-ARTS LITHO C.15.  
ZENAGLOSS C.25. • ZENAGLOSS  
COVER C.25. • LITHOGLOSS C.15.  
CATSKILL LITHO C.15. • CATSKILL  
OFFSET C.25. • ESOPUS POSTCARD  
C.25. • ESOPUS TINTS

THE MARTIN CANTINE COMPANY  
Specialists in Coated Paper since 1888  
Saugerties, N. Y. and New York City  
In San Francisco and Los Angeles—Wylie & Davis



## Harris feed roll register is hairline in a hurry

Harris feed rolls on the 23 x 30" are unique in this size press. They combine big-press precision register with quick change-over, fast makeready features.

Feed rolls "pace" the sheet through a split-second sequence of stops and starts. Then, the feed rolls accelerate the sheet to a speed faster than that of the impression cylinder and "overfeed" the gripper edge against the gauge pins. Result: the same precision register at *all* running speeds!

The 23 x 30" model is also available with 3-point, tumbler-gripper register.

Fifty years of offset experience and the world's finest service organization back up your investment in a Harris. Check with your local Harris-Seybold sales representative.

For detailed information on the 23 x 30" feed roll press, send for a copy of the **NEW** specification folder. Write or call . . .



### HARRIS-SEYBOLD

4510 East 71st Street, Cleveland 5, Ohio

You get more with one of the "FIRST FOUR"

